Environmentality

Community, Intimate Government, and the Making of Environmental Subjects in Kumaon, India[1]

by Arun Agrawal

This paper examines how and for what reasons rural residents come to care about the environment. Focusing on Kumaon, India, it explores the deep and durable relationship between government and subjectivity and shows how regulatory strategies associated with and resulting from community decision making help transform those who participate in government. Using evidence drawn from the archival record and fieldwork conducted over two time periods, it analyzes the extent to which varying levels of involvement in institutional regimes of environmental regulation facilitate new ways of understanding the environment. On the basis of this analysis, it outlines a framework of understanding that permits the joint consideration of the technologies of power and self that are responsible for the emergence of new political subjects.

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Down the street an ambulance has come to rescue
an old man who is slowly losing his life. Not many
can see that he is already becoming the backyard
tree he has tended for years.. . .
— JOY HARJO, *How We Become Humans*

On my first visit to Kumaon in northern India in 1985, I met a number of leaders of the widely known Chipko movement, including Sundar Lal Bahuguna and Chandi Prasad Bhatt.[2] The meeting that left a longer-lasting impression, however, was to occur in a small village, Kotuli, where I spent nearly a week investigating how villagers used their forests. Hukam Singh, a young man with a serious air, told me that it was futile to try to save forests. Too many villagers cut too many trees. Too many others did not care. He himself was no exception. "What does it matter if all these trees are cut? There is always more forest." In fact, he judged that at best only a few villagers might be interested in what I was calling "the environment." "Women are the worst. With a small hatchet, they can chop so many branches you will not believe." He qualified this somewhat: "Not because they want to, but they have to feed animals, get firewood to cook."

Hukam Singh's judgment is probably less important for what it says about processes of environmental conservation in Kotuli than for what it reflects of his own position. Talking with other people, I realized that the long periods Hukam Singh spent in the town of Almora prevented him from appreciating fully the efforts afoot to protect trees and forests—the most visible face of the environment in Kumaon. He was trying to get a job in the Almora district court and had stopped farming some of the family agricultural holdings. The meetings that the forest council called almost every other month were not just a sham. The 85 acres of village forest were more densely populated with trees and vegetation than several neighboring forests. Despite the numerous occasions when the village guard caught people illegally cutting tree branches or grazing animals, most villagers did not think of the forest as a freely available public good that could be used at will.

The reasons my conversations with Hukam Singh had a more lasting effect than those with the well-known Chipko leaders were to become apparent during my return visits to Kotuli. I visited again in 1989–90 and in the summer of 1993. In these intervening years, Hukam Singh had left Almora, settled in Kotuli, and married Sailadevi from the nearby village of Gunth. He had started cultivating his plots of irrigated land and bought several cattle. He had also become a member of Kotuli's forest council. One of his uncles, a member of the council, had retired, and Hukam Singh had replaced him. More surprising, Hukam Singh had become a convert to environmental conservation. Sitting on a woven cot, one

2. For a recent careful study of the Chipko movement, its leadership, and its strategies, see Rangan (2000). See Mawdsley (1998) for thoughtful reflection on how Chipko has become an idiom in conservationist arguments.

sturdy leg tapping the ground impatiently, he explained one afternoon, "We protect our forests better than government can. We have to. Government employees don't really have any interest in forests. It is a job for them. For us, it is life." Feeling that he had not made his point sufficiently convincingly, he went on. "Just think of all the things we get from forests—fodder, wood, furniture, food, manure, soil, water, clean air. If we don't safeguard the forest, who else will? Some of the people in the village are ignorant, and so they don't look after the forest. But sooner or later, they will all realize that this is very important work. It is important even for the country, not just for our village."

These different justifications of his personal transformation into someone who cared about protecting trees and situated his actions within a general framework of conservation are too resonant with prevailing environmentalist rhetorics to sound original. But to dismiss them because they are being repeated by many others would be to miss completely the enormously interesting, complex, and crucial but understudied relationship between changes in government and related shifts in environmental practices and beliefs.[3] It would not be wrong to say that the shift in Hukam's beliefs hints at what is perhaps the most important and underexplored question in relation to enviromental regulation. When and for what reason do socially situated actors come to care about, act in relation to, and think about their actions in terms of something they identify as "the environment"?

My paper attempts to fill this gap. It explores the deep and durable relationship between government and subjecthood and shows how regulatory strategies associated with and resulting from community decision making help transform those who participate in government. Using evidence drawn from archival records and fieldwork conducted in 1989–90 and 1993, the paper examines the extent to which varying levels of involvement in institutional regimes of environmental regulation lead to new ways of understanding the world. In the process it helps explain transformations over time and differences at a given point in time in how people view their relationship with the environment.[4]

Hukam Singh did not care much about the village forest in 1985 but by 1993 had come to defend the need for its regulation. Similarly, concern for the environment in Kumaon has grown over time. Widespread involvement in specific regulatory practices is tightly linked with the

emergence of greater concern for the environment and the creation of "environmental subjects"—people who care about the environment. For these people the environment is a conceptual category that organizes some of their thinking and a domain in conscious relation to which they perform some of their actions. I draw on evidence related to forests as an example of an environmental resource. Further, in considering an actor as an environmental subject I do not demand a purist's version of the environment as necessarily separate from and independent of concerns about material interests, livelihoods, and everyday practices of use and consumption. A desire to protect commonly owned/managed trees and forests, even with the recognition that such protection could enhance one's material self-interest, can be part of an environmental subjectivity. In such situations, self-interest comes to be cognized and realized in terms of the environment.

If the environmental aspect of "environmental subjects" requires what Donald Moore (personal communication, 1998) calls "boundary work," so does the second part of the phrase. It should be evident that I do not use "subjects" in opposition either to citizens or to objects. One commonsense meaning of "subjects" would be "actors" or "agents." But when subjected, people are also subordinated—a second way of thinking about the subject. And the third obvious referent of the term is the notion of a theme or domain, as in the environment's being the subject of my research. I use the idea of subjects to think about Kumaon's residents and changes in their ways of looking at, thinking about, and acting in forested environments in part because of the productive ambiguities associated with it. Each of its referents is important, but this paper focuses on the continuum between the meanings of subject as agent or subordinate rather than the legal-juridical meanings associated with Mamdani's (1996) work or the idea of subject that is roughly equivalent with the notion of a theme.

Given the existence of environmental subjects in Kumaon, what is it that distinguishes them from those who continue not to care about or act in relation to the environment? Of the various residents of Kotuli, only some have changed their beliefs about the need for forest protection. Some remain unaffected by changing regulations, and others harvest forest products without attending to or caring about locally formulated enforcement. Thus, to say that Kumaonis have come to care about their forests and the environment is only to suggest that some of them—in increasing numbers over the past few decades perhaps—have done so.

Answers to questions about who acts and thinks about the environment as a relevant referential category when, how, and why are important for both practical and theoretical reasons. Depending on the degree to which individuals care about the environment, the ease with which they agree to contribute to environmental protection may be greater and the costs of enforcing new environmental regulations may be lower. But equally important is the theoretical puzzle: What makes certain kinds of subjects, and what is the best way to understand

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3. For a distinction between "government" and "governance," see Rose (1999: chap. 1). "Government," as used in this paper, refers to the different mechanisms used to shape the conduct of specific persons and groups, including the mechanisms that such persons and groups use on themselves. "Governance" is more directly tied to the functioning of state apparatuses and refers to the regulatory strategies deployed formally by states with regard to their citizens (see Rhodes 1996).

4. For some important work that begins this kind of analysis, see Agarwal (1992), Blake (1999), Bryant (2002), Li (2000), Luke (1999), and Sivaramakrishnan (1999). Relatively few political ecologists or ecofeminists attend to the issues explored in this paper (see Escobar 1999 and Warren 1997).

the relationship between actions and subjectivities? Against the common presumption that actions follow beliefs, this paper will present some evidence that people often first come to act in response to what they may see as compulsion or as their short-term interest and only then develop beliefs that defend short-term-oriented actions on other grounds as well. It will also show that residents of Kumaon vary in their beliefs about forest protection and that these variations are related to their involvement in regulatory practices rather than their social-structural location in terms of caste or gender.

My argument is that beliefs and thoughts are formulated in response to experiences and outcomes over many of which any single agent has little control. There is little doubt that one can change some aspects of the world with which one is in direct interaction, but equally certainly the number and types of forces that affect even one's daily experiences transcend one's own will and design. Much of what one encounters in the world results only partly from strategies reflecting one's own knowledge and preferences. At any given moment, people may plan to act in accordance with their beliefs. But all plans are incomplete and imperfect, and none incorporate the entire contextual structure in which actions lead to consequences. For these and other reasons, actions have unanticipated outcomes. The experience of these unanticipated outcomes does not always confirm actors in their beliefs; some of these outcomes may demonstrate that those beliefs are inappropriate or that earlier subject positions need revision. In these situations, actors have an incentive to work on their beliefs, preferences, and actions, incorporating into their mentalities new propensities to act and think about the world. Even if only a very small proportion of one's daily experience serves to undermine existing beliefs, over a relatively short period (such as a year or two) there may be ample opportunity to arrive at subject positions that are quite different from those held earlier. In this way of thinking about subject positions, the durability of subjectivity or the notion of subjectivity as the seat of consciousness is what is being contested.

In part, I view such opening up and questioning of the idea of durable and sovereign subject positions as a way to facilitate a conversation among scholars who are often concerned with similar analytical and theoretical questions but use different terms—preferences, identity, subjectivity—to signal their common object of concern. Thus, despite the major theoretical differences among economists, sociologists and anthropologists, and poststructuralists, they often refer to similar empirical phenomena when, for example, they assert that "preferences emerge from interactions between individuals and their environment" (Druckman and Lupia 2000:1), speak of the role of anthropologists in the "construction of Chumash identity and tradition" (Haley and Wilcoxon 1997: 761), or suggest that "human subjectivity is socially elaborated" (Cronick 2002:534). By pointing to these potentially fruitful areas of overlap I do not intend to deny the real differences among those who use particular terms to signal their specific theoretical allegiances.

Rather, my aim is to indicate common concerns across disciplinary divisions, show how different terms are deployed in different disciplines to refer to common concerns about the making of subjects, and foreground some skepticism about the possibility of access to a deep subjectivity. An ethnographer's observations, conversations, interviews, and surveys are ways of opening a window and throwing light on how people think, act, imagine, or believe at any given moment and how their ways of doing and being change over time. Investigators—indeed, even close friends and family members—can deduce internal states of mind only from external evidence. There is no direct access to inner thoughts or subject positions.[5]

In any event, persuasive answers about variations between subject positions and the making of subjects are likely to hinge on explanations that systematically connect policy with perceptions, government with subjectivity, institutions with identities. Environmental practice, this paper suggests, is the key link between the regulatory rule that government is all about and imaginations that characterize particular subjects. In contrast, social identities such as gender and caste may play only a small role in shaping beliefs about what one considers to be appropriate environmental actions. This should not be surprising. Although the politics and analytics of identity consider significant the external signs of belonging, it is the tissue of contingent practices spanning categorical affiliations that is really at stake in influencing interests and outcomes. In the subsequent discussion, I hope to sketch the direction in which analysis needs to move.

Producing Subjects

The description of my meetings and conversations with Hukam Singh, although it seems to be located quite firmly in an argument about the emergence of new subjectivities in relation to the environment, resembles Geertz's idea of "a note in a bottle." It comes from "somewhere else," is empirical rather than a philosopher's "thought experiment," and yet has only a passing relationship to representativeness (Greenblatt 1999: 14–16). Making it connect better with a social ground and with other roughly similar stories requires the development of some crucial terms and the presentation of additional evidence. Two such terms are "imagination" and "resistance."

In his seminal account of nationalism's origins, Anderson famously suggests that the nation is an imagined community (1991 [1983]). In a virtuoso performance, he strings together historical vignettes about the development of nationalisms in Russia, England, and Japan in the nineteenth century (pp. 83–111) to show how these cases offered models that could successfully be pirated by other states where "the ruling classes or leading el-

5. In this regard, see also Sen's (1973) brilliant demonstration of the fatal tensions in operationalizing the preference-revelation mechanisms so beloved of behavioral economists.

ements in them felt threatened by the world-wide spread of the nationally-imagined community" (p. 99). The model that according to Anderson comes to triumph is that of "official nationalism."[6] He suggests (p. 110) that official nationalisms were

> *responses* by power groups . . . [who were] threatened with exclusion from, or marginalization in, popularly imagined communities. . . . Such official nationalisms were conservative, not to say reactionary, *policies*. . . . very similar policies were pursued by the same sorts of groups in the vast Asian and African territories subjected in the course of the nineteenth century. . . . they were [also] picked up and imitated by indigenous ruling groups in those few zones (among them Japan and Siam) which escaped direct subjection.

It is interesting, even disturbing, that for Anderson the successful adoption, superimposition, and spread of official nationalisms as a substitute for popular nationalisms lay well within the capacities of ruling groups to accomplish, despite the imagined nature of nationalism. A number of scholars have imaginatively elaborated on the term "imagination" in talking about the nation (Appadurai 1996:114–15; Chakrabarty 2000a:chap. 6), but in *Imagined Communities* itself the subsequent analysis gives it relatively short shrift. The successful imposition of an official version of nationalism around the globe, coupled with the imagined quality of national emergence that is the core of Anderson's intervention, implies that power groups were able to colonize the very imagination of the masses over whom they sought to continue to rule. How they overcame, even for a few decades and certainly only patchily, the resistance that existing senses of "imagined belonging" posed to their efforts requires further elaboration than Anderson provides. The politics at the level of the subject that is likely involved in the struggle between official and popular nationalisms remains to be compellingly articulated.[7] National subjects (to use shorthand to refer to the colonization of political imagination by official nationalizing policies) emerged in history. A history of nationalism therefore requires a politics of the subject.[8]

The question when, why, and how some subjects rather than others come to have an environmental con-

sciousness is precisely what Anderson leaves out in considering the nation. Analogous judgments about the transformation of the consciousness of those who are less powerful can also be found in the work of other scholars. According to Barrington Moore, "People are evidently inclined to grant legitimacy to anything that is or seems inevitable no matter how painful it may be. Otherwise the pain might be intolerable" (1978:459). One might ask, "All people?" If not all, then surely we are forced to ask which ones, when, why, and how. The same motivation to account for social and political acquiescence impels Gaventa's (1982) brilliant study of power and quiescence in Appalachia, but his analysis of the third face of power can be supplemented by the examination of mechanisms that would explain when and how it is that some people come to accept the interests of dominant classes as their own *and others do not.*

In contrast to Anderson, for whom the imagination of the less powerful subject is smoothly appropriable by official policies, scholars of resistance have often assumed the opposite. For them, resisting subjects are able to protect their consciousness from the colonizing effects of elite policies, dominant cultures, and hegemonic ideologies. This ground truth forms both their starting assumption and their object of demonstration. Scott's path-breaking study of peasant resistance (1985), his more general reflections on the relationship between domination and resistance (1989), and the work on resistance that emerged as a cross-disciplinary subfield in the wake of his interventions have helped make familiar the idea that people can resist state policies, elite power, and dominant ideologies. Scott assertively advances the thesis that the weak probably always withstand the powerful, at least in the realm of ideas and beliefs. He also suggests that when their autonomous views about the prevailing social order are invisible it is because of material constraints and fear of reprisals upon discovery, not because they have come wholeheartedly to acquiesce in their own domination, let alone because their consciousness has been incorporated into a hegemonic ideology.

Scott articulates this position most fully, but a similar understanding of peasants and their interests was also part of early efforts of subaltern-studies scholars to identify an autonomous consciousness for the excluded agents of history.[9] Ranajit Guha's (1982a) seminal statement on the historiography of colonial India, for example, in calling for a more serious consideration of the "politics of the people," portrays the subaltern as "autonomous" and subaltern politics as structurally and qualitatively different from elite politics in that "vast areas in the life and consciousness of the people were never integrated into [bourgeois] hegemony" (pp. 4–6; see also Guha 1997). Even those who note that the opposition between domination and resistance is too mechan-

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6. Anderson borrows the term from Seton-Watson but gives it a bite all his own (p. 86)

7. It is precisely this politics that Chakrabarty (2000a), indebted no doubt in important ways to Chatterjee (1986, 1993), draws attention when he seeks to "make visible the heterogeneous practices of seeing" that often go under the name of imagination. Chakrabarty examines the differences among the many ways of imagining the nation by talking about peasants and a literate middle class.

8. The inattention to this politics in Anderson's account is signaled, of course, at the very beginning of his cultural analysis of nationalism. After defining the nation as "an imagined political community—and imagined as both inherently limited and sovereign" (1991[1983]:6–7), he closely examines every term in the definition except "political." It is not only Anderson's history of nationalism that can be enriched by attending to the politics of subjecthood but also his view of culture more generally.

9. The essays in Guha and Spivak (1988) are among the best introductory texts about subaltern studies. See Guha (1982b, 1997), and Chatterjee and Jeganathan (2000) for a sense of the different moments in the life of a collective. Ludden's (2001) collection of papers constitutes a fine example of some of the more careful critical engagements with the work of subaltern-studies writers.

ical to capture how the consciousness of those subject to power changes with their experience of power go on to note that the process is "murky" (Comaroff and Comaroff 1989:269, 290). But for scholars of resistance and subalternity, the autonomous consciousness of peasants, the subaltern, and other marginalized groups endures in the face of dominant elite pressures operating in a spectrum of domains, not just in the domain of policy.[10]

It is clear that the works discussed above constitute two facets of the puzzle of the relationship between government and subjectivity. Each facet is a strong argument in favor of a particular tendency: in the one one case, the tendency toward the colonization of the imagination by powerful political agents and in the other the tendency toward durability of a sovereign consciousness founded upon the bedrock of individual or class interest. Within themselves, these arguments are at least consistent, but considered jointly as a potential guide to the relationship between the subject and the social they lead to conflicting conclusions. It is crucial not just to account for the persistence of a certain conception of interests within a group of people or to assume the straightforward transformation of one conception of interests into another but to explore more fully the mechanisms that can account for both (and other) possible effects on people's conceptions of their interests.

I weave a path through the opposed conclusions of these two different streams of scholarship by suggesting that technologies of government produce their effects by generating a politics of the subject that can be better understood and analyzed by considering both practice and imagination as critical.[11] The reliance on imagination by some scholars (Appadurai 1996, Chakrabarty 2000a) in thinking about the emergence of different kinds of subjects is a step in the right direction. But closer attention to social practices can lead to a species of theorizing more closely connected to the social ground in which imagination is always born and, reciprocally, that it often influences. A direct examination of the heterogeneous practices that policy produces and their relationship with varying social locations has the potential to lead analysis toward the mechanisms involved in producing differences in the way subjects imagine themselves. My interest is to highlight how it might be possible and why it is necessary to politicize both community and imagination in the search for a better way to think about environmental politics.

Foucault's insights on the "subject" form a crucial point of reference but also a point of departure in considering the political that is silenced in Anderson's vision of the imagined community. In *Discipline and Punish*,

Foucault elaborates a particular model of subject making—the panopticon—which facilitates the application of power in the form of a gaze. "He who is subjected to a field of visibility, and who knows it, assumes responsibility for the constraints of power; he makes them play spontaneously upon himself; he inscribes in himself the power relation in which he simultaneously plays both roles; he becomes the principle of his own subjection" (1979 [1975]:202–3). Here then is a mechanism—the gaze—that acts as a sorting device. Those subject to the gaze become subject to power, examples of the effects it can produce. Those who escape the gaze also, presumably, escape the effects of power.

Although this example introduces political practice into the process by which subjects make themselves, it obviously will not do. By itself, the model needs more work for any number of reasons, among them its absence even in total institutions and the infeasibility of applying its principles outside such institutions.[12] Nor is it the case that visibility in asymmetric political relationships necessarily produces subjects who make themselves in ways desired by the gaze of power. Foucault does not elaborate on the specific mechanisms implicated in the making of subjects (Butler 1997:2). He does, however, refer to the indeterminacy that is inherent in the process because modern forms of power and mechanisms of repression do not yield predictable outcomes (1978a:115).

Thus, he argues in *Discipline and Punish* that "it would be wrong to say that the soul is an illusion, or an ideological effect. On the contrary, it exists, it has a reality, it is produced permanently around, on, within the body by the functioning of a power that is exercised on those punished—and, in a more general way, on those one supervises, trains and corrects . . . " (1979 [1975]: 27). But his studies (1978b, 1980) of Pierre Riviere and Hercule Barbin are about how these persons mobilized counterdiscourses against dominant scientific accounts of their transgressions and crimes. He makes the point clearly in his discussion of different technologies that shape humans. There are "technologies of power, which determine the conduct of individuals and submit them to certain ends or domination, [leading to] an objectivizing of the subject; and technologies of the self, which permit individuals to effect . . . a certain number of operations on their own bodies and souls, thoughts, conduct, and ways of being, so as to transform themselves . . ."(1988:18). In his own attempts to trace how subjects make themselves, Foucault is especially attentive to the practices related to ethical norms in late antiquity, the confessional, and the pastorate; however, the specific institutional and political arrangements that shape practice and subjectivity vary both over time and in space. Foucault explicitly recognizes the many different ways in which subjects come into being (2000 [1979], 2000 [1982]). Much of the vast secondary literature on neoliberal governmentality, in contrast, defers a consider-

10. At the same time, it is fair to observe that more recent scholarship in a subalternist mode has begun to use more seriously Foucault's ideas about power and subject formation and to examine how different kinds of subjects come into being both under colonialism and in modernity (Arnold 1993, Chakrabarty 2000b, Prakash 2000).
11. For an attractive recent account of environmentalist history, forces of modernization, and changing imaginaries, see Gold and Gujar (2002).

12. By "total institutions" I mean what Foucault (1979 [1975]:263) calls "complete and austere institutions"; prisons, concentration camps, and insane asylums are prime examples.

ation of how subjects make themselves, focusing primarily on technologies of power aimed at objectifying individuals.[13]

The same observation applies to many of those who extend Foucault's ideas about governmentality to the colonial and postcolonial contexts, remaining preoccupied mostly with the coercive aspects of state, institutional, and social power (Ferguson 1994 [1990], Gupta 1998, Scott 1995, Pels 1997; cf. Bryant 2002). Even in works that focus on the conscious reshaping of the self by the use of technologies of the self, however, there is relatively little attention to variations in self formation and accounting for such variations in terms of social practice—the main focus of the ensuing discussion. In particular, writings in the field of development and environmental conservation, even when influenced by Foucault and Bourdieu, have been relatively inattentive to the variable ways in which self formation takes place and how it may be shaped by involvement in different forms of practice (cf. Blake 1999).

I use the term "environmentality" here to denote a framework of understanding in which technologies of self and power are involved in the creation of new subjects concerned about the environment. There is always a gap between efforts by subjects to fashion themselves anew and the technologies of power that institutional designs seek to consolidate. The realization of particular environmental subjectivities that takes place within this gap is as contingent as it is political. Indeed, it is the recognition of contingency that makes it possible to introduce the register of the political in thinking about the creation of the subject. It is also precisely what Appadurai (1996:134) has in mind when he suggests that colonial technologies left an indelible mark on Indian political consciousness but that there is no easy generalization about how and to what extent they "made inroads into the practical consciousness of colonial subjects in India." Among the dimensions he mentions as important are gender, distance from the colonial gaze, involvement with various policies, and distance from the bureaucratic apparatus.[14]

These factors are of course important. Nonetheless, it is necessary to distinguish between the politics generated by involvement in different kinds of practices and the politics that depends on stable interests presumed to flow from belonging to particular identity categories (Lave et al. 1992, Willis 1981). Much analysis of social phenomena takes interests as naturally given by particular social groupings: ethnic formations, gendered divisions, class-based stratification, caste categories, and so

forth. Imputing interests in this fashion to members of a particular group is common to streams of scholarship that are often seen as belonging to opposed camps (Bates 1981, Ferguson 1994 [1990]). But doing so is highly problematic when one wants to investigate how people come to hold particular views about themselves and how their conceptions of their interests change.

Categorization of persons on the basis of an externally observable difference plays down the way subjects make themselves and overlooks the effects that subjects' actions have on their senses of themselves. Using social identities as the basis for analysis may be useful as a first step, a sort of gross attempt to make sense of the bewildering array of beliefs that people hold and the actions they undertake. To end analysis there, however, is to fail to attend to the many different ways in which people constitute themselves, arrive at new conceptions of what is in their interest, and do so differently over time.[15]

To say that people's interests change so as to take into account environmental protection is not to suggest that conflicting desires for personal gain, defined potentially in as many ways as there are subjects, no longer exist or that interests do not matter. Instead, it is to insist on the mutability of conceptions of interests and subjects' practices.[16] To use an imperfect analogy, it is to think of subjectivity as a palimpsest on which involvement in institutionalized practices inscribes new and sometimes conflicting understandings of what is in one's interest over and over again. Social and environmental practice as it emerges under differing institutional and political circumstances is, therefore, a critical mediating concept in my account of the connections between context and subjectivity.[17] Under changing social conditions and institutions, identity categories as guides to a person's interests make sense only to the extent that they prevent, facilitate, or compel practice.

Focusing attention on specific social practices relevant to subject formation along a given dimension or facet of identity creates the opportunity for learning more about how actions affect ways of thinking about the world and produce new subjects.[18] Undoubtedly, practices are al-

13. See, for example, Luke (1999), most of the essays in Barry, Osborne, and Rose (1996), and the vast majority of the essays on governmentality-related papers in the journal *Economy and Society*. Among the exceptions are Dean (1994, 1995) and Rimke (2000). See also Rose's extensive work on psychology (1989, 1998).

14. See also Dean (1999), Hacking (1986), and the essays in Burchell, Gordon, and Miller (1991). Poovey (1995) provides a closely argued account of the relationship among policy, institutions, changes in practices, and the formation of class and culture.

15. For insightful studies that illustrate the difficulty of reading interests from identity categories, see Carney (1993) and Schroeder (1999). Robbins (2000) shows how the intersection of caste and gender influences environmental management.

16. As Bourdieu says, "the concept of interest as I construe it has nothing in common with the naturalistic, trans-historical, and universal interest of utilitarian theory. . . . Interest is a historical arbitrary, a historical construction that can be known only through historical analysis, *ex post,* through empirical observation and not deduced a priori" (Wacquant 1989:41–42).

17. Some useful introductions to the large literature on practice and identity can be found in Mouffe (1995), Perry and Maurer (2003), and Quashie (2004). The insights of the Birmingham School are especially relevant here. For a useful review and introduction see Lave et al. (1992).

18. My thinking on this subject has been significantly influenced by feminist work on the materiality of the body, in which the body is understood "as neither a biological nor a sociological category, but rather the point of overlap between the physical, the symbolic, and the material social conditions" (Braidotti 2003:44). See also Butler (1993) for a provocative discussion of the materiality of the body.

ways undertaken in the context of institutionalized structures of expectations and obligations, asymmetric political relations, and the views that people have of themselves. But to point to the situatedness of practices and beliefs is not to grant social context an unambiguous influence on practice or practice a similar control over subjectivity. Rather, it is to ground the relationship between context, practice, and subjectivity in evidence and investigative possibilities. It is simultaneously to refuse to accept the common social-scientific practice of using identity categories or a combination of such categories to infer people's interests.

Variations in Environmental Subjectivities in Kumaon

This paper considers two forms of variations in environmental subjectivities in Kumaon—those that have unfolded over time and those that are geographically distributed. The first set of changes is that by which Kumaonis, formerly persons who opposed efforts to protect the forested environment, became persons who undertook the task of protection themselves. Instead of protesting the governmentalization of nature, Kumaonis became active partners in that governmentalization (Agrawal 2001, Sarin 2002). I describe below the alchemical shift in interest, beliefs, and actions for which the move toward community partially stands. Equally important to understand, however, are the contemporary differences in environmental practices and beliefs among Kumaonis and their effect on the costs of environmental regulation.

My examination of changes over time and contemporary social-spatial variations in the way Kumaon's residents see themselves and their forests draws on three bodies of evidence. The first comes from archival materials about Kumaonis' actions in forests in the first three decades of the twentieth century and a survey of forest council headmen in the early 1990s, 60 years after forest council regulations became the basis for local forest-related practices. The second body of evidence comes from two rounds of interviews I conducted with 35 Kumaon residents in seven villages, the first in 1989 and the second in 1993.[19] Of the seven villages, four had formed councils in the years between 1989 and 1993. Both in 1989 and 1993, I asked my respondents approximately 40 structured and unstructured questions about their socioeconomic status, modes of participation in the use and government of forests, views about forests, and relationships with other villagers and Forest and Revenue Department officials. The responses to some of the questions can be presented quantitatively. In the discussion below, I report the quantitative information in tabular form and offer extended extracts from my in-

formants' responses to provide texture to the inferences that .the evidence in the tables facilitates. The third body of evidence comes from 244 surveys I carried out in 1993 in 46 villages. These villages included those I had visited in 1989, and 38 of them had forest councils. In the remaining 8 villages, villagers' relationship to environmental enforcement was restricted to infrequent interactions with Forest Department guards, seen only irregularly in the forests that villagers used. (Villagers prefer not to see Forest Department guards, but they prefer even more that the guards not see them!)

I use different sources of evidence in part of necessity. What I wish to understand and explain is how the subject positions of Kumaonis about their forests have changed, and since it is impossible to go back in time to gain direct testimony from them, the archival record is a useful substitute. Statements by colonial officials about the actions of Kumaon's villagers serve as the basis for inferences about what might have motivated these actions. They need some interpretive care, since both Revenue and Forest Department officials likely wrote so as to portray their departments in the most favorable light possible. Finally, since the archival record provides information about both ordinary villagers and their leaders, I used fieldwork to gain information from both these types of residents in contemporary Kumaon.

A second reason to use different sources in combination—quantitative data and detailed verbal responses—is to triangulate across my findings from these different sources. Quantitative data provide information on how the understandings of a large number of my respondents have changed in the aggregate. It is therefore extremely useful to indicate changes in a summary fashion and to take into account even those respondents whose answers do not match my expected findings. But quantitative information is less reliable as an index to the mental state of specific individuals. It may be true that even when actions and words of individuals are observed at length and over a long time period they cannot reveal the "truth" about subject positions, but more detailed observations *can* facilitate a more reliable sense or at least more reasonable inferences about individual subjectivities. Reliance on a combination of sources allows me to make general inferences about transformations in subjectivities over long periods of time, make more specific arguments about such changes over short periods, and, finally, construct preliminary arguments about the relationship between subjectivities and institutionalized practices versus identity categories.

HISTORICAL CHANGES IN ENVIRONMENTAL SUBJECTIVITIES

Hukam Singh's personal example illustrates what has obviously been a much larger and more comprehensive process of social environmental change in Kumaon. A number of studies have outlined the acts of rebellion of Kumaon's hill people at the beginning of the twentieth century in response to the British colonial state's efforts to constrain and close access to forests (Sarin 2002, Shri-

19. During my first visit, I had talked with a total of 43 villagers. I could not meet and talk with 8 on them in 1993 for a variety of reasons; several had moved out of the village, several could not be located, and 1 had died.

vastava 1996). Between 1904 and 1917 more than 3,000 square miles of forest were transferred to the Imperial Forest Department in greater Kumaon (KFGC 1921), of which nearly 1,000 square miles were located in the Nainital, Almora, and Pithoragarh Districts.[20] Even earlier, the colonial state had made inroads into the area of forests under the control of local communities, but these latest incursions raised the special ire of the villagers. Their grievances were particularly acute because of new rules that specified strict restrictions on lopping and grazing rights, restricted the use of nontimber forest products, prohibited the extension of cultivation, increased the amount of labor extracted from the villagers, and augmented the number of forest guards. The last raised the level of friction between forest guards and the village women who harvested products from the forest.

Unwilling, often because they were unable, to accede to the demands made by the colonial Forest Department, Kumaonis ignored the new rules that limited their activities in forests that the state claimed as its own. They also protested more actively, often simply by continuing to do what they had done before the passage of new regulations. They grazed their animals, cut trees, and set fires in forests that had been classified as reserved. Forest Department officials found it next to impossible to enforce the restrictive rules in the areas they had tried to turn officially into forests.

Law enforcement was especially difficult because of the unwillingness of villagers to cooperate with Forest Department officials. The department staff was small, the area it sought to police was immense, and the supervisory burden was onerous. Decrying the lopping for fodder by villagers and the difficulty of apprehending those who cut fodder, E. C. Allen, the deputy commissioner of Garhwal, wrote to the commissioner of Kumaon, "Such loppings are seldom detected at once and the offenders are still more seldom caught red-handed, the patrol with his present enormous beat being probably 10 miles away at the time . . . . It is very difficult to bring an offence, perhaps discovered a week or more after its occurrence, home to any particular village much less individual" (1904:9). Demarcation of the forest boundaries, prevention of fires, and implementation of working plans meant an impossibly heavy workload for Forest Department guards and employees even in the absence of villager protests. When the number of protests was high and villagers set fires often, the normal tasks of foresters could become impossible to perform. One Forest Department official was told by the deputy commissioner of Kumaon that "the present intensive management of the forest department cannot continue without importation into Kumaon of regular police" (Turner 1924).

After the stricter controls of 1893, the settlement officer, J. E. Goudge (1901:10), wrote about how difficult it was to detect offenders in instances of firing:

In the vast area of forests under protection by the district authorities the difficulty of preventing fires and of punishing offenders who wilfully fire for grazing is due to the expense of any system of fire protection. Where forests are unprotected by firelines, and there is no special patrol agency during the dangerous season, it is next to impossible to find out who the offenders are and to determine whether the fire is caused by negligence, accident, or intention.

In a similar vein, the Forest Administration Report of the United Provinces in 1923 said about a fire in the valley of the Pindar River (Review 1924:266): "During the year, the inhabitants of the Pindar valley showed their appreciation of the leniency granted by Government after the 1921 fire outbreak, when a number of fire cases were dropped, by burning some of the fire protected areas which had escaped in 1921. . . . These fires are known to be due to direct incitement by the non-cooperating fraternity." The sarcasm is clumsily wielded, but its import is obvious: villagers could not be trusted because ungratefulness was their response to leniency. Other annual reports of the Forest Department from around this period provide similar claims about the lack of cooperation from villagers, the irresponsibility of villagers, and the inadvisability of any attempt to cooperate with them to achieve protectionist goals. At the same time, some state officials underlined the importance of cooperation from villagers. Percy Wyndham, asked to assess the impact of forest settlements, said in 1916, "It must be remembered that in the tracts administration is largely dependent on the goodwill of the people and the personal influence of the officials [on the people]" (quoted in Baumann 1995:84).

Other reports reveal continuing difficulties in apprehending those who broke rules to shape forest use and management. Names of people who set fires could not be obtained. Even more unfortunate from the Forest Department's point of view, it was not only the ordinary people but also the heads of villages, *padhans*, who were unreliable. Many village heads were paid by the colonial state and were often expected to carry out the work of revenue collection. Their defiance, therefore, was even more a cause for alarm. As early as 1904 the deputy commissioner of Almora, C. A. Sherring, remarked on the heavy work that *patwaris* performed for the Forest Department and argued in favor of increasing their number substantially because the *padhans* were unreliable (1904:2):[21]

It is certain that very little assistance can be expected from the padhans, who are in my experience only too often the leaders of the village in the com-

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20. Since I completed my fieldwork, the districts of Almora and Pithoragarh have had two new districts carved out of them: Bageshwar and Champawat.

21. *Patwaris* constituted the lowest rung of the revenue administration hierarchy in colonial Kumaon and typically oversaw land revenue collection for anywhere up to 30 villages, depending on the size of the village and the distances involved. They continue to be critical to revenue administration and play an important role in the collection of statistics, calling village households to account for minor infractions of official rules, whether related to agriculture or to forestry.

mission of offences and in the shielding of offenders. . . . If the control of open civil forest is to be anything more than nominal we really must have the full complement of patwaris. . . . A large forest staff of foresters and guards is also required.

The deputy conservator of forests similarly complained that villagers refused to reveal the culprit in investigations concerning forest-related offences: "It is far too common an occurrence for wholesale damage to be done by some particular village. . . . Often nothing approaching the proof required for conviction can be obtained. . . . There is too much of this popular form of wanton destruction, the whole village subsequently combining to screen the offenders" (Burke 1911:44, quoted in Shrivastava 1996:185). These reports and complaints by colonial officials in Kumaon make clear the enormous difficulties the Forest Department faced in realizing its ambition to control villagers' actions on land made into forest. The collective actions of villagers in setting fires and lopping trees and their unwillingness to become informants against their "fraternity" indicate the strands of solidarity that connected them in their work against the colonial state. With unreliable villagers, limited resources, and few trained staff, it is not surprising that the Forest Department found it hard to rely only on those processes of forest making that it had initiated and implemented in other parts of India—processes that relied mainly on exclusion of people, demarcation of landscapes, creation of new restrictions, and fines and imprisonment.[22]

The response of the state, in the shape of an agreement with Kumaon residents to create community-managed forests, was an uneasy collaboration among the Revenue Department, foresters, and villagers (Shrivastava 1996, Agrawal 2001). It appointed the Kumaon Forest Grievances Committee to look into complaints by Kumaonis against the Forest Department and on the basis of the committee's recommendations passed new rules to facilitate the formal creation of village-based forest councils that could govern local forests. Over the next 60 years more than 3,000 new councils came into being in Kumaon. The Revenue Department has created new officials who supervise the functioning of these councils. Annual reports detail the progress in creation of councils, their income from sales of timber and resin, and the extent to which this form of government has found acceptance in Kumaon's villages.

The birth of a new form of regulatory rule has been accompanied by shifts in how Kumaon's villagers today regard forests, trees, and the environment. Some indication of the extent to which contemporary Kumaonis have changed in their beliefs, not just their actions, about

22. The inability of the state to protect property in the face of concerted resistance is of course not a feature of peasant collective action in Kumaon alone. The threat to established relations of use and livelihood that the new regulations posed is similar to the threat that new technologies and new institutions have posed in other regions. For example, the invention of mechanized implements has often sparked such responses from peasants and agrarian labor and found some success precisely because of the inability of the state machinery to detect rule violations (Adas 1981).

forest regulation is evident from the results of a survey of forest council headmen I conducted in 1993. The council headmen in Kumaon have come to occupy an intermediate place in the regulatory apparatus for the environment. On the one hand, they are the instruments of environment-related regulatory authority. On the other, they represent villagers' interests in forests. The greatest proportion of responses concerns the inadequate enforcement support they get from Forest and Revenue Department officials. The government of forests at the level of the community is hampered by the unwillingness or inability of state officials to buttress attempts by villagers to prevent rule infractions. A rough calculation shows that nearly two-thirds of the responses are directly related to headmen's concerns about the importance of and difficulties in enforcing regulatory rule. Admittedly, the council headmen are the persons most likely to be concerned about forests and the environment among all the residents of Kumaon. But the point to note is that even when presented with an opportunity to voice the problems that they face and potential ways of addressing them, only a very small proportion of the responses from the headmen are complaints about the lack of remuneration (row 8). The headmen evidently put their own material interests aside as they tried to grapple with the question of the problems that characterize government by communities.

The figures in the table are no more than an abstract, numerical summation of many specific statements that the survey also elicited. The common themes in these statements call for a tabular representation, but the sentiments behind the numbers come from actual words. "I have tried to give up being the head of our committee so many times. But even those who don't agree with me don't want me to leave," observed one of the headmen. Another said, "I have given years of my life to patrolling the forest. Yes. There were days when my own fields had a ripening crop [and needed a watchman]. I am losing my eyesight from straining to look in the dark of the jungle. And my knees can no longer support my steps as I walk in the forest. But I keep going because I worry that the forest will no longer survive if I retire." Sukh Mohan's views about the making and maintenance of his village's forests focus on his personal contribution. One might even discount some of what he and the other headmen say as hyperbole—rhetoric inflating the contribution they actually make. But what is more interesting is that this rhetoric in favor of forest protection matches objectives that the Forest Department began pursuing nearly 150 years ago. Puran Ram gave a reason for his conservationist practice: "We suffered a lot from not having too many trees in our forest. Our women didn't have even enough wood to cook. But after we banned cattle and goats from the forest, it has come back. Now we don't even have to keep a full-time guard. Villagers are becoming more aware." Many other forest council headmen concurred. Some of the more striking statements included "If we want to get sweet fruit, we first have to plant trees" and "The side of the mountain is held together by the roots of the trees we plant and

grow. Without the forest, the whole village would slide into the mouth of the river."[23]

Puran Ram and Hukam Singh both thus expressed a hope for a connection between their efforts to conserve the forest and the actions of other villagers. This common hope, which I encountered in other conversations as well, is an important indication of the relationship between actions and subject positions. It signals that in many of the villages a new form of government frames and enacts reasonable guidelines for villagers' practices in the expectation that over time practice will lead to new subjectivities, new ways to regard the forest. Villagers may be forced to follow council regulations in the short run, but over time they will come to see that stinting is in their own interest. The forest belongs to the collective defined as the village, and when an individual harvests resources illegally the action adversely affects all members of the collective. The examples of both Puran Ram and Hukam Singh, as indeed those of more than two-thirds of the headmen in my survey, suggest that the expectation is not just a fantasy.

The differences in the voice and tenor of archival and more recent statements I collected offer a basis for the judgment that the practices and views of many of Kumaon's residents about their forests have changed substantially. Some of these changes reflect a greater interest in careful use of forest products, a greater willingness to abide by regulations, and a stronger desire to call upon state officials to help protect trees in comparison with the past. These changes in subjectivities have occurred since the passage of the Forest Council Rules in 1931. Partly responsible for these changes is the idea that Kumaonis can consider the region's forests their own once again. I do not report statements and actions of the same individual persons who lived in the early 1900s, but a systematic change seems to have occurred in the forest-related practices and beliefs of individuals belonging to the same social class and status over the time period in question.[24] Within the shift in ownership by the collective, there are of course many variations. Not all villagers have come to see Kumaon's forests as their own. Variations in their beliefs about forests and in their practices around regulation of forest protection are not, however, directly connected to the benefits they receive from forests. Benefits from forests are formally equitably allocated, and this equitable allocation is reflected in the actual harvests by most villagers (Agrawal 2001, Shrivastava 1996). But even within villages there is significant variation in how villagers see forests and protect them.

23. For a quantitative analysis of the data from the survey, see Agrawal and Yadama (1997).
24. I have reported statements and actions by various persons as being representative of the groups to which they belong, a common strategy for scholars belonging to fields as different in their assumptions as cultural anthropologists and rational-choice political scientists. See Bates (1981) and Bates, Figueredo, and Weingast (1998) as rational-choice exemplars of this strategy and Ferguson (1994 [1990]) and Gupta (1998) as counterpart examples from cultural anthropology.

It may be argued that appropriations by the colonial state in the early twentieth century drove a wedge between forests and villagers. Subsequently, the rules that led to community-owned and community-managed forests reaffirmed the propriety and legality of villagers' possession of forests. They recognized that villagers have a stake in what happens to forests and expressed some faith in their ability, especially with guidance, to take reasonable measures for their protection. These institutional changes go together with changes in villagers' actions and beliefs about forests. One way to explain this change in villagers' actions and beliefs is to suggest that the observed shift in policy and the subsequent changes in beliefs and actions are unrelated—that they are sufficiently separated in time that a causal connection can only tenuously be drawn. This is frankly unsatisfactory. At best it is a strategy of denial. A more careful argument would at least suggest that shifts in villagers' actions and statements in the later part of the twentieth century are no more than a response to the changes in ownership that the new policy produced. The transfer of large areas of land to villagers in the form of community forests has created in them a greater concern to protect the forests and care for vegetation that they control.

This is an important part of the explanation. It usefully suggests that the way social groups perceive their interests is significantly dependent on policy and regulation instead of being constant and immutable. But it is still inadequate in two ways. It collapses the distinction between the interests of a group as perceived by an observer-analyst and the actions and beliefs of members of that group. In this explanation, interests, actions, and beliefs of all group members are of a piece, and any changes in them take place all at once. This assertion of an identity among various aspects of what makes a subject and the simultaneity of change in all of these aspects is at best a difficult proposition to swallow. We often arrive at a new sense of what is in our interest but continue to hold contradictory beliefs and act in ways that better match the historical sense of our interests. Many of the headmen whom I interviewed in Kumaon or who became part of my survey were trying to enforce rules that they knew were not in the interests of their own households. Their wives and children were often apprehended by the forest guards they appointed. Yet, they defended their actions in the name of the collective need to protect forests and expressed the hope that over time villagers would come around to their view and change their practices in forests. As the next section makes clear, their hopes were not in vain. Many villagers proved susceptible to these shifting strategies of government.

A second problem with the explanation that headmen care for forests because they have the right to manage them is that it confuses the private interests and actions of the headmen with their public office and interests. The forests that have been transferred to village communities are managed by collective bodies of anywhere between 20 and 200 village households represented by the forest councils and their headmen (Sarin 2002). To attribute a collective interest to these bodies and explain

what the headmen of these councils say in terms of that interest is to elide all distinctions between specific individual actors and the organizations they lead. A more intimate and careful exploration of other actors in Kumaon who are involved in the local use and protection of forests is necessary. Only then can we begin to make sense of the changes indicated by the survey of headmen summarized in table 1 and the information below about the beliefs of Kumaonis about their forested environments.

RECENT CHANGES IN ENVIRONMENTAL SUBJECTIVITIES

When I went to Kumaon and Garhwal in 1989, I traveled there as a student interested in environmental institutions and their effects on the actions and beliefs of their members. My main interest was to show that environmental institutions—the forest councils—had a significant mediating impact on the condition of forests. Not all villages had created local institutions to govern their forests. Of the 13 that I visited, only 6 had forest councils. The ones that did differed in the means they used to protect and guard forests. Since my interest was primarily to understand institutional effects on forests, I focused on gathering archival data from records created and maintained locally by village councils. My conversations with village residents were aimed chiefly at gaining a sense of their views about forests and the benefits they provided. I found that villagers who had forest councils were typically more interested in forest protection. They tried to defend their forests against harvesting pressures from other residents within the same village but especially from those who did not live in their village. They also stated clear justifications of the need to protect forests, even if their efforts were not always successful. In one village near the border between Almora and Nainital Districts, a villager used the heavy monsoons to make the point:[25]

> Do you see this rain? Do you see the crops in the fields? The rain can destroy the standing crop. But even if the weather was good, thieves can destroy the crop if there are no guards. It is the same with the forest. You plant a shrub, you give it water, you take care of it. But if you don't protect it, cattle can eat it. The forest is for us, but we have to take care of it, if we want it to be there for us.

Another villager in a council meeting I attended pointed to the difficulties of enforcement:[26]

> Until we get maps, legal recognition, and marked boundaries [of the local forest], council cannot work properly. People from Dhar [a neighboring village] tell us that the forest is theirs. We cannot enter it. So we can guard part of the forest, and we don't know which part [to guard]. Since 1984 when the

25. Interview #2 with Shankar Ram, translated by Kiran Asher.
26. Interview #13 with Bachi Singh, translated by Kiran Asher.

TABLE 1

*Complaints by Forest Council Headmen (*n = 324) in Kumaon, 1993*

Complaints Mentioned by Headmen (in Order of Frequency)	Number of Headmen Listing the Complaint
1. Inadequate support from Forest and Revenue Department officials	203 (.63)
2. Limited powers of council officials for environmental enforcement	185 (.57)
3. Insufficient resources in forests for the needs of village residents	141 (.44)
4. Low income of the council	130 (.40)
5. Inadequate demarcation of council-governed forests	61 (.19)
6. Lack of respect for the authority of the council among villagers	42 (.13)
7. Land encroachment on council-managed forests	36 (.11)
8. Lack of remuneration for headmen	31 (.10)
9. Other (e.g., incorrect mapping of forest boundaries, length of court cases, violation of rules by residents of other villages, too much interference in the day-to-day working of the council, lack of information about forest council rules)	64 (.20)

NOTE: Figures in parentheses indicate the proportion of headmen mentioning that complaint. Each headman could list up to three complaints.

panchayat was formed, we have been requesting the papers that show the proper limits so we can manage properly, protect our forest. But what can one do if the government does not even provide us the necessary papers?

A second villager in the same meeting added, "Mister, this is Kaljug.[27] No one listens to authority. So we must get support from the forest officers and revenue officers to make sure that no one just chops down whatever he wants."

Residents of the seven villages that did not have forest councils scarcely attempted any environmental regulation—no doubt in significant part because the forests around their village were owned and managed by either the Forest Department or the Revenue Department. Villagers perceived regulation as the responsibility of the state and as a constraint on their actions in the forest—gathering firewood, grazing animals, harvesting trees and nontimber forest produce, and collecting fodder. There were therefore clear differences between the actions and statements of villagers who had created forest councils and brought local forests under their control and those

27. In Indian mythology, Kaljug is the fourth and the final era before time resumes again to process through the same sequence of eras: Satjug, Treta, Dwapar, and then Kaljug. It is the time when *dharma*—action according to norms—gives way to *adharma*—action in violation of norms—and established authority fails.

table 2
Changing Beliefs of Villagers about the Environment, 1989–93

Presence/Absence of Forest Council in 1993 and Year of Interview	Number of Respondents	Degree of Agreement on Forest Protection[a]	Number Giving Economic versus Other Reasons for Forest Protection		Degree of Willingness to Reduce Consumption of Forest Products
			Economic	Other	
Present					
1989	20	2.35	16	4	1.45
1993	20	3.65	12	8	3.00
Absent					
1989	15	2.47	11	4	1.73
1993	15	2.27	12	3	1.87

note: Changes in degree of agreement on forest protection and degree of willingness to reduce consumption of forest products in the villages that had forest councils in 1993 are statistically significant: for forest protection, $\chi^2 = 14.03$, d.f. $= 4$, $p < .005$; for reduction of consumption, $\chi^2 = 15.05$. d.f $= 4$, $p < .005$.
[a]Responses scored on a scale of 1 (low) to 5 (high).

of villagers who relied on state-controlled forests to satisfy their requirements for fodder and firewood.

During my return visit in 1993 I realized that four of the seven villages (Pokhri, Tangnua, Toli, and Nanauli) that had lacked forest councils in 1989 had formed their own councils in the intervening years. They had drafted constitutions modeled on others in the region and used the provisions of the Forest Council Rules to bring under their control the local forests that had earlier been managed by the Revenue Department. A series of resolutions by the new councils prescribed how (and how often) to hold meetings, when to elect new officials, the basis for allocating fodder and grazing benefits, the levels of payments by villagers in exchange for the right to use forests, monitoring practices in relation to the forests' condition and use, and ways to sanction rule breakers. Exposure to these new institutional constraints, council members hoped, would lead villagers to more conservationist practices in the forest. Many households in fact had begun sending members to council meetings. In two of the villages, households regularly participated in patrolling the forest. In three of them they were restricting the amount of fodder and firewood that was harvested, the number of animals that were grazed, and the incidence of illegal entry into the forest by outsiders. In one village the council had stopped a long-standing case of encroachment on the government land that had become community forest.

In the four villages with new forest councils, I had talked with 20 residents in 1989. At that time their statements had not suggested that they felt any pressing need for conserving the environment. Little had distinguished their actions and views from those of the 15 residents with whom I had talked in the other three villages (Darman, Gogta, and Barora). The three questions for which their responses can be summarized are as follows:

1. Do you agree with the statement "Forests should be protected"? Please indicate the extent of your agreement by using any number between 1 and 5, where 1 indicates a low degree of agreement and 5 indicates strong agreement.

2. If forests are to be protected, should they be protected for economic reasons or for other noneconomic benefits they provide, including cleaner air, soil conservation, and water retention?

3. Do you agree with the statement "To protect forests, my family and I are willing to reduce our consumption of resources from the local forests"? Please indicate the extent of your agreement by using any number between 1 and 5, where 1 indicates a low degree of agreement and 5 indicates strong agreement.[28]

The figures in table 2 indicate that the differences among the residents of the seven villages in 1989 were relatively minor. All villagers expressed limited agreement with the idea that forests should be protected; their reasons were mainly economic, and they were relatively unwilling to place any constraints on the consumption of their families to ensure forest conservation. Although there was little basis for differentiating among the responses of the two sets of villagers in 1989, changes became evident in 1993 when I talked again with the same villagers. In the case of the four villages that had created forest councils, the differences were obvious both in their actions and in what they said about forests and the environment. Some of them had come to participate actively in their new forest councils, and a few had limited their use of the village forest. Some acted as guards, and some even reported on neighbors who had broken the

28. The form in which I posed these three questions may have increased the likelihood of responses indicating the desire to protect forests. My interest, however, is less in presenting a representative picture of the extent of environmental awareness in Kumaon than in showing how the desire to protect forests changes over time and how it is related to practice versus identity categories such as caste and gender. I have not identified any reasons that there would be a bias in favor of overreporting of environmental awareness that would be systematically related to the passage of time or to different identity categories.

council's rules. The similarities in their changed behavior and the changed behavior of the forest council headmen that I briefly described above are quite striking. Those who had come to have forest councils in their villages or, perhaps more accurate, those whose councils had come to have them, had begun to view their and others' actions in forests in a way that valorized protection of trees and economy in the use of forest products.

Of course, there were others in these four villages who had not changed much. Those with whom I talked were especially likely to continue to say and do the same things as in 1989 if they had not participated in any way in the formation of the forest councils or in the suite of strategies used by forest councils to try to protect forests. If they had become involved in the efforts to create a council or protect the forest that came to be managed by the council, they were far more likely to suggest that the forest required protection. They were also more likely to say that they were willing to be personally invested in protection. This is certainly not to claim that participation in council activities is a magic bullet that necessarily leads to transformation of subject positions. And yet, the testimony of these 20 residents, by no means a representative sample in a statistical sense, constitutes a valuable window on how beliefs change for those who come to be involved in practices of environmental regulation (see table 2).

Residents in the four villages with forest councils expressed greater agreement with the idea of forest protection and greater willingness to reduce their own consumption of forest products from local forests in 1993 than in 1989. They explained that reducing consumption of firewood and fodder from council-managed forests typically meant the exercise of even greater care in use, the substitution of agricultural waste for fodder, using pressure cookers or improved stoves, and in some instances shifting harvesting activities to government-owned forest. Of the 20 individuals, 13 had participated in monitoring or enforcement of forest council rules in some form, and the shifts in their environmental beliefs turned out to be stronger than for those who had not become involved in any forest-council-initiated action.

The example of Nanauli is useful for elaborating on some of the points that table 2 summarily conveys. A lower-caste woman (Sukhi Devi), a lower-caste man (Ramji), and two upper-caste men (Hari Singh and Govind Joshi) were my four respondents in Nanauli. In 1989 they were only mildly in agreement with the idea of protecting forests; they equated such protection with limits on their family's welfare and capitulation to the demands of the Forest Department. Sukhi Devi said that she was not sure her actions would have any effect. Ramji refused even to accept that the condition of the village forest was the responsibility of villagers. Hari Singh, prefacing his comments with a curse against external meddling in village affairs (a sentiment from which I was unsure that I was excluded), began counting on his fingers the reasons not to do anything about the forest: "Fires in the forest are natural. If the forest is closed to grazing, what will village animals eat? Even if villagers in Nanauli stop cutting trees, those living in other villages will not stop.

The near-vertical slopes in many parts of the forest mean that it is naturally protected. The Forest Department already has a guard in place. Villagers do not have time to waste." He would have gone on but for the interruption from Govind Joshi: "Leave it alone, Hari. Agrawalji gets the idea."[29]

When I returned in 1993, I encountered quite a different situation. The newly formed forest council for Nanauli had been talking to villagers about the importance of looking to the future, and villagers had started paying a small amount to the council for the grass and firewood they extracted from the forest. The council had appointed a full-time guard who was paid out of villagers' contributions. The council was holding 10–15 meetings a year, mostly clustered together during the monsoon months. And Ramji, who had served a six-month stint as the forest guard, seemed deeply committed to the forest council and its goals. When I reminded him of my previous visit and conversation, he overcame his earlier reluctance to dismiss Hari Singh's opinions of four years ago. "You know, some people watch and others do. When there was talk of making a council, I was one of the first to realize how much it would benefit our village. Hariji has much education, a lot of land, many trees on that land. He does not need the council forest. No wonder he doesn't see any reason to help with the forest." Although Hari Singh was not involved in any direct monitoring or enforcement activities, he *was* one of the seven council members and was making his contributions toward the salary of the village guard on time. When I asked whether he was willing to reduce his use of forest products to protect trees, he almost snapped at me, "Am I not already paying for the guard, and [thereby] reducing my family's income? Do you want to skin me alive to save the trees?"[30] His shortness could easily have been the result of a struggle he was likely waging within himself—on the one hand helping guard the forest and on other wondering if it was necessary. Of the four persons with whom I had talked in 1989, Sukhi Devi was the least oriented toward forest protection. She was poor and had fallen behind on the contribution each village household was making toward guard salaries. For her, the council with its talk of forest protection was yet another imposition among the many that made her life difficult. As I sat with her and one of my research assistants in front of her leaky thatched hut, she slowly said, "I have grown old, seen many changes. I don't know if we need all these meetings and guards and fines. We were doing fine. All this new talk of saving trees makes my head spin."[31]

These different responses contain important clues about the relationship between social-environmental practices, redefinition of a subject's interests, and formation of new subjectivities. As individuals undertake new actions, often as a result of resolutions adopted by

29. Interviews #17, 18, 19, and 20 with Ramji, Govind Joshi, Hari Singh, and Sukhi Devi, translated by Ranjit Singh.
30. Interviews #17a and 19a with Ramji and Hari Singh, translated by Ranjit Singh.
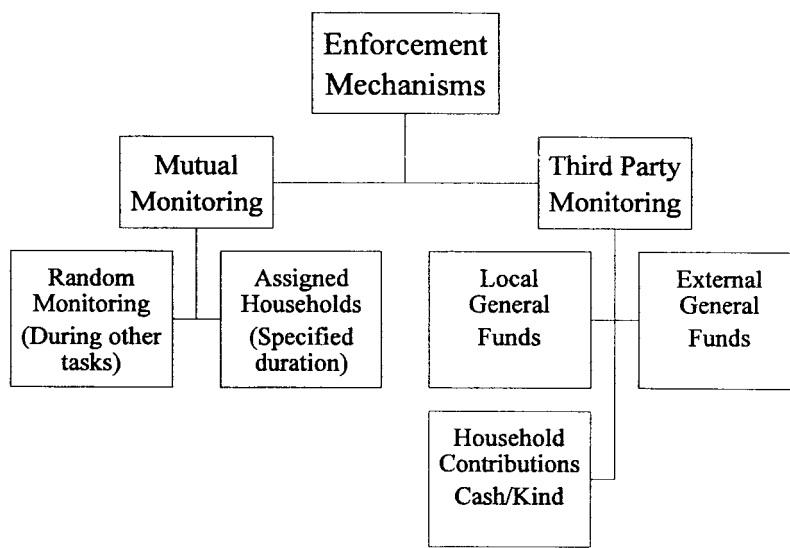31. Interview #20a with Sukhi Devi, translated by Ranjit Singh.

FIG. 1. *Types of monitoring mechanisms in Kumaon forest councils.*

their village's forest council, they have to define their own position in relation to these resolutions and the changes in practices that they necessitate. Their efforts to come to a new understanding of what constitutes their best interest in the context of new institutional arrangements and new knowledge about the limits of available resources must entail significant internal struggles. If Ramji spends months trying to apprehend rule violators, walking around the forest, being held accountable for unauthorized grazing and felling, and being paid for his efforts, it is understandable that he has begun thinking of his interests and subjectivity in relation to these practices rather than in terms of his caste or gender. Similarly, if Govind Joshi and Hari Singh are contributing toward protection, they have to move some mental furniture around to accommodate actions involving them in forest protection. If Sukhi Devi does not engage in activities that orient her to think about what she does in the forest except to view it as a source of material benefits, it is not surprising that her gender or caste does not make her a defender of the forest. Socially defined identity categories are a poor predictor of interests precisely because they objectify and homogenize their members, ignoring the very real lives that people live in the shadow of their social identities. Imputing a common set of interests to all those who belong to a particular identity category is only a convenient analytical tool. More complex theorizing in this vein—relating caste and gender or caste, gender, and class to interests, for example—is subject to the same critique.

The information from interviews in these four villages is especially useful in comparison with the 15 interviews in the three villages where no councils had emerged in the intervening years. In these villages, where I also conducted a second round of interviews in 1993, there had been little change in the environment-related practices

of local residents. They still regarded the idea of protecting local forests as a waste of time and the presence of Forest Department guards as a veritable curse. Many of them, usually after looking around to make sure no officials were present, roundly abused the Forest Department. Indeed, this is a practice that villagers in other parts of rural India may also find a terrifying pleasure. But even when my interviewees agreed that it was necessary to protect tree because of their benefits, they were unwilling to do anything themselves toward such a goal. For the most part, their positions regarding forests and the environment had changed little.

VARIATIONS IN ENVIRONMENTAL SUBJECTIVITIES: THE PLACE OF REGULATION

The environmental practices and perceptions associated with the emergence of forest councils in Kumaon contain many variations. The preceding discussion, despite its important clues to sources of variation, is based on highly aggregated information. To examine how and to what extent regulatory practices, in contrast to structural-categorical signs of belonging such as caste and gender, relate to the environmental imaginations of Kumaonis, I report on the responses of more than 200 persons I met and interviewed in 1993. The larger number of people makes it possible to examine how different forms of monitoring and enforcement relate to respondents' beliefs about the environment.

The forest councils in Kumaon depend for enforcement on monitoring by residents themselves or by third parties (fig. 1). Under one form of mutual monitoring, any villager can monitor any of the others and report illegal actions in the forest to the council. Under the other, households are assigned monitoring duties in turn. There is little specialization in the task of monitoring

and monitors are not paid for their work. In contrast, third-party monitoring involves the appointment of a specialized monitor who serves for a specific period and is paid for the work performed. Forms of third-party monitoring are distinguished by the mode of payment: direct payments by households in cash or in kind, salary payments by the council from funds raised locally, and salary payments from funds made available through sale of forest products or transfers from the state. Table 3 summarizes the responses for different forms of monitoring and shows the extent to which participation in monitoring and enforcement is connected to respondents' beliefs about forests and the environment.

For all forms of monitoring, respondents expressed a greater desire to protect forests if they participated in monitoring than if they did not, but the difference between participants and nonparticipants is more striking as monitoring becomes more specialized and villagers participate directly in enforcement. Where monitoring is a specialized role for assigned households or for assigned individuals paid from villagers' own funds, participation in monitoring is positively related to both a greater appreciation of the need to protect the environment and a greater willingness to undergo some limits on personal consumption to protect the environment. Conversations with villagers over several months in summer 1993 fleshed out the details of this statistical pattern and indicated the close relationship between social-ecological practices and environmental subject positions. In Pokhri the forest council was relatively new, and its officials had experimented with a number of different strategies of monitoring and enforcement. The ten households constituting the village had finally settled

upon mutual monitoring whereby each household was assigned monitoring duties in weekly rotation. As a result, all village households took part in patrolling, reporting, and discussions associated with monitoring, even if only once every ten weeks. The women I met in Pokhri, usually the persons charged with cooking, collecting firewood, and fetching water, were far more likely to report on their neighbors' activities in the forest, say that they wanted to conserve the forest, and describe how they drove other villagers or their animals from their forest than those of the nearby village of Kurchon, where villagers paid their guard out of funds that the Revenue Department sent them as their share of the resin sales from their forest.[32] Ishwari Devi, an upper-caste woman in Pokhri, explained, "Kurchon's people have it easy. They get so much money for their pine resin from the Forest [Department], they don't have to worry about how to pay their guard. But unless you have stayed up in the night to save your crops, you don't love your fields."[33] Bachiram Bhatt repeated her point about the relationship between work and psychological orientation in a slightly different way when he said that his own daily activities had been affected little by his council or its attempts at

32. Many forest councils with large forests that have mature pine trees entrust the Forest Department with the work of tapping the trees for resin. The Forest Department channels back nearly 80% of the sale proceeds of the resin it harvests, and this can be a substantial sum for the councils. The Kurchon council received an annual average of nearly 800 rupees from the department (approximately US$30 according to exchange rates prevailing at the time of fieldwork). In contrast, the residents of Pokhri raised just 200 rupees a year to pay their guard.

33. Interview #140a with Ishwari Devi, translated by Ranjit Singh.

TABLE 3
Participation and Belief among Villagers, 1993

Monitoring Strategy and Participation	Number of Respondents	Degree of Agreement on Forest Protection[a]	Number Giving Economic versus Other Reasons for Forest Protection		Degree of Willingness to Reduce Consumption of Forest Products[a]
			Economic	Other	
Mutual					
All (random)					
Participant	8	3.25	4	4	2.63
Nonparticipant	2	3.00	2	0	2.00
Rotation					
Participant	12	4.25	4	8	3.42
Nonparticipant	5	2.80	4	1	2.40
Third-party					
Paid by household					
Participant	32	4.00	20	12	3.06
Nonparticipant	7	2.86	6	1	2.29
Paid with local funds					
Participant	55	3.98	36	19	2.80
Nonparticipant	43	2.81	38	5	1.72
Paid with external funds					
Participant	9	3.66	6	3	2.66
Nonparticipant	32	2.31	30	2	1.53

[a]Responses scored on a scale of 1 (low) to 5 (high).

TABLE 4
Gender, Caste, Participation, and Belief

Dimension of Difference	Number of Respondents	Degree of Agreement on Forest Protection[a]	Number Giving Economic versus Other Reasons for Forest Protection		Degree of Willingness to Reduce Consumption of Forest Products[a]
			Economic	Other	
Gender					
Women	95	3.38	69	26	2.45
Men	110	3.36	80	30	2.34
Caste					
High	106	3.44	78	28	2.44
Low	99	3.30	71	28	2.42
Participation					
Yes	116	3.92	70	46	2.97
No	89	2.66	79	10	1.74

[a]Responses scored on a scale from 1 (low) to 5 (high).

forest protection and enforcement. "The council holds only three meetings in a year and the business is over quickly because we don't have to worry about how to pay the guard," he said.[34] The larger number of households in Kurchon also likely means that few people are involved with forest protection in a direct way. These various conversations with villagers revealed no clear relationship between gender, caste, and environmental subject positions.

These conversations suggest that the difference between those who participate in monitoring and those who do not is greatest for the forms of monitoring in which there is role specialization and villagers directly invest labor or money in monitoring. It also shows that the choice of monitoring by a forest council does not affect all villagers in the same manner. It is the villagers who take direct part in monitoring or in funding monitoring activities who express greater interest in forest protection. These villagers are also more invested than nonparticipants in seeing forest protection as an important goal even if they do not expect immediate economic benefits. The responses of nonparticipants in each type of monitoring are closer to those of villagers who do not have a forest council in their village at all. The clear implication is that practices that involve villagers more directly and closely in managing forests and protecting them are associated with a greater desire to protect the environment. Further, it is in villages with the highest participation in monitoring and enforcement that councils have the greatest ability to raise resources to protect forests. Both in villages where the most basic form of mutual monitoring is in force and in those where resources for monitoring are primarily secured from outside sources, the ability of the council to gain participation is more limited.

This evidence does not permit the inference of a

34. Interview #167a with Bachiram Bhatt, translated by Ranjit Singh.

causal-sequential relationship between participation in monitoring and the development of environmental subjectivities. Such an inference would be possible only if one were to interview the same respondents before and after their participation in enforcement. The combination of archival data with the survey of headmen reported in table 1 and the information in table 2 comes closest to such before-and-after evidence. The figures in table 3 show only variations in subjectivities across different forms of monitoring. It may be reasonable to suggest that it is differences in beliefs that prompt my respondents to participate in monitoring rather than participation that leads them to different beliefs. It is when we consider the archival evidence and the information in table 2 and 3 together that it becomes at all justifiable to suggest that variations in the environmental identities of Kumaon residents are systematically related to their participation in environmental enforcement and that these differences stem at least to some extent from such participation.

The importance of participation in different monitoring mechanisms becomes evident also in comparison with social identity categories such as gender and caste. Table 4 shows the difference between environment-related beliefs of villagers interviewed by their gender (women versus men), caste (high versus low), and participation in different forms of monitoring. There is relatively little difference between men and women or higher- and lower-caste respondents; they seem equally (un)likely to want to protect forests or reduce their own household's consumption to conserve forests. The absence of a close connection between social identity categories such as caste or gender and a predisposition toward environmental protection can be readily explained by the fact that these identities are not systematically tied to involvement in institutionalized practices to patrol the forest or monitor rule compliance or to level of participation in council elections or meetings. If any-

TABLE 5
Contributions per Household Toward Enforcement by Forest Councils

Form of Monitoring	Number of Respondents	Contribution per Household (in Rupees)
Mutual monitoring (each household monitors all others)	10 (2 villages)	9.33
Mutual monitoring (households assigned monitoring duty in rotation)	17 (3 villages)	11.44
Third-party monitoring (households pay monitors directly)	39 (7 villages)	36.61
Third-party monitoring (salary paid out of locally raised funds)	98 (18 villages)	19.98
Third-party monitoring (salary paid out of external transfers)	41 (8 villages)	16.22

thing, women are less likely to be involved in efforts to monitor or govern forests than men. Indeed, the exclusion of women from effective and meaningful participation in environmental decision making and enforcement has been remarked upon by other scholars (Agarwal 2001). Ultimately, it is those who are involved in the activities of their forest councils, contributing materially to environmental enforcement, or directly involved in monitoring and enforcement who are more likely to agree with the need to protect forests, to say that forests need to be protected for environmental rather than economic reasons, and to accept some reduction in their own use so as to ensure forest protection.

Interview responses from villagers again resonate with the numerical estimates in the table. One of Bhagartola's male residents who had been active in his council's meetings and forest protection since the council was formed 50 years ago said,[35]

> I know this forest since the Forest Department took it at the beginning of the first war. They took out all the almond and walnut trees; many of the oak died. Pine is there in two of the [forest] compartments now. But all the forest and trees are ours today. We made our council in year 1933 [*san 90*], as soon as we could. We get fodder and money from our forest, and everyone understands its value. We would not have if the forest had remained with the [Forest] Department.

It is reasonable to conclude that when villagers participate in monitoring and enforcement they come to realize at a personal level the social costs generated by those who do not adhere to the practices and expectations that have been collectively established. They confront those who act illegally in the forest more directly and then must decide whether to enforce the rules, ignore those who violate rules, or join them in violating socially constructed norms and expectations. Choosing

the first option means working to redefine one's interests and subjectivity. Similarly, those whose actions violate collectively generated guidelines to regulate practice can often continue to do so when it is individually expedient and there is no regulatory mechanism in place. But when enforcement is commonplace, rule violators are more often confronted with knowledge of their own deviations and the consequences of deviations. When their actions are met with direct challenges that they consider appropriately advanced (because collectively agreed upon), it becomes far more difficult to continue to act and believe in a deviant manner. It is in examining practices of villagers closely that it thus becomes possible to trace the links between politics, institutional rules, and practices and subject formation.

The effects of more widespread participation are also visible in the resources that councils are able to raise for protecting forests. Table 5 presents the per-household contributions that forest councils are able to deploy annually. The form of monitoring that leads to the highest level of contributions is the one in which households pay the guard directly. Mutual monitoring by households themselves produces the lowest level of contributions. Indeed, councils resort to this form of forest protection when they are unable to gain the agreement of their members to spend sufficient monetary and or material resources on paying a guard for monitoring. The amount shown as "contributions" under third-party monitoring in which the guard is paid from external funds is misleading because these are, strictly speaking, the resources available for monitoring from all sources (including transfers from the government and the sale of forest products), not just the contributions of village households.

Clearly, engagement with the regulatory practices of monitoring and enforcement is positively connected both with the existence of environmental orientations among Kumaon's residents and with higher monetary and material contributions toward enforcement per household. The inference important for policy is that certain forms of environmental enforcement are associated with greater commitment to environmental conservation, higher levels of local involvement, and the generation of environmental subjectivities. The larger

35. Interview #26a with Sujan Singh Negi, translated by Ranjit Singh. Coincidentally, Bhagartola had 70 households in 1993; its residents contributed nearly 45 rupees each toward forest protection and had adopted a system of monitoring in which a specialized guard was paid out of locally raised funds (Agrawal 2001).

point of the discussion is that participation in certain forms of environmental regulation and enforcement generates new conceptions of what constitutes the participants' interest.

Intimate Government

A useful metaphor for thinking about the mechanisms that underpin the production of various forms of subjectivity in Kumaon is what Latour (1987) has called "action at a distance" and, following him, Miller and Rose (1990) have termed "government at a distance." Latour answers how it might be that intentional causes operate at a distance to effect particular kinds of actions in places and by people that are not directly controlled. Examining the work of scientists, Callon and Latour (1981) and Latour (1986) describe the affiliations and networks that help establish links between calculations at one place and actions in another. The crucial element in their argument is the "construction of allied interests through persuasion, intrigue, calculation, or rhetoric" (Miller and Rose 1990:10). It is not that any one of the actors involved appeals to already existing common interests; rather, one set of actors, by deploying a combination of resources, convinces another group that the goals and problems of the two are linked and can be addressed by using joint strategies.[36]

In Kumaon, two crucial types of resources that the Forest and Revenue Departments combined and deployed in the 1920s and '30s were information and forests. Information about the adverse effects of centralized government of forests in Kumaon during the 1910s and about the government of forests by communities in the region prepared the ground for the argument that regulatory control over forests could be decentralized to positive effect. The experience of decentralized government of forests in Burma and Madras and the investigation of these experiences firsthand by departmental officials in the 1920s helped produce the design of the Forest Council Rules of 1931. The gradual return of the same forested lands that villagers had used until the 1890s (which the Kumaon Forest Department had appropriated between 1893 and 1916) provided the material basis for the idea of a common interest in forest protection between village communities and the Forest Department. Forest councils became the institutional means to pursue this common interest over long geographical distances.

In the formulation "action at a distance" or "government at a distance," it is geographical distance that action and government overcome. In an important sense, these formulations are about the uncoupling of geographical distance from social and political distance that forms of modern government accomplish. By clarifying and specifying the relationship between particular practices in forested areas and the sanctions that would follow

those practices, government encourages new kinds of actions among those who are to be governed. Action at a distance thus overcomes the effects of physical separation by creating regulations known to those located at a distance. Officials who oversee the translation of these regulations onto a social ground succeed in their charge because of the presence of a desire among environmental subjects to follow new pathways of practice.

One can well argue that the government of the environment in Kumaon conformed to this logic of action at a distance in its earlier phases, before the institution of community-based government. In this earlier phase, the effort to induce a change in the actions of villagers failed because of the inability of the Forest Department to develop a vision of joint interests in forests with which Kumaonis could identify or to persuade villagers that their practices in the region's forests could complement those of the department. But the forest councils created the potential for villagers and state officials to come together in a new form of government through which a compelling vision of joint interests could be manufactured and new practices jointly pursued. Once the colonial government and Kumaon's villagers had crafted highly dispersed centers of environmental authority, processes of government at a distance came to be supplemented by what might be called "intimate government."[37] Given the widespread recent efforts around the world to institute similar processes of environmental government—joint action by local residents and state departments—it is imperative to attend more closely to the relationship between subjectivity and government.[38]

In contrast to government at a distance, which presupposes centers of calculation, constant oversight, continuous collection of information, unceasing crunching of numbers, and the imposition of intellectual dominance through expertise (Miller and Rose 1990: 9–10), intimate government in Kumaon works by dispersing rule, scattering involvement in government more widely, and encouraging careful reckoning of environmental practices and their consequences among Kumaon's residents. Actors in numerous locations of environmental decision making work in different ways and to different degrees to protect forests. Homogeneity across these locations is difficult to accomplish. Differences among villages in resource endowments, biophysical attributes, social stratification, levels of migration, histories of cooperation, and occupational distribution—to name a few of the relevant factors—make visions of singular control utopian at best. Monitoring of villagers' actions is patchy and unpredictable. Councils collect in-

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36. Miller and Rose (1990) follow this argument closely as they examine how modern government overcomes the diluting effects of distance on the exercise of power.

37. In coining the phrase "intimate government" I acknowledge a debt to Hugh Raffles (2002), who uses the idea of intimate knowledge in talking about indigenous knowledges and their circulation in the corridors of policy making.
38. The exploding literature on decentralization of environmental governance shows just how widespread this phenomenon is. See reviews in Ribot and Larson (2004), Wiley (2002), Agrawal (2004), and FAO (1999). Unfortunately, almost none of these reviews or, indeed, the texts discussed by them attend to changes in environmental subjectivities.

formation, but it is available only locally and seldom processed and presented in a way that might be useful for policy elsewhere. Practice and sociality rather than expertise form the basis of intimate government to regulate villagers' actions. The ability of regulation to make itself felt in the realm of everyday practice depends upon the channeling of existing flows of power within village communities toward new ends related to the environment. The joint production of interests is based on multiple daily interactions within the community. To the extent that these interactions are shaped by councils, they are politically motivated toward greater conservation. In their responses to measures adopted by the councils, villagers undertake their own calculus of potential gains and losses.

As community becomes the referential locus of environmental actions, it also comes to be the arena in which intimate government unfolds. Intimate government shapes practice and helps to knit together individuals in villages, their leaders, state officials stationed in rural administrative centers, and politicians interested in classifying existing ecological practices. Intimate government involves the creation and deployment of links of political influence between a group of decision makers within the village and the ordinary villagers whose practices it seeks to shape. Institutional changes in the exercise of power are the instruments through which these links between decision makers and the practices of villagers are made real. When successful, this process is closely tied to processes of environmental protection, as the evidence in this paper suggests. Variation in institutional forms of enforcement is linked with the participation that villagers are willing to provide and forest council decision makers try to elicit. Specialization of enforcement roles and direct participation in enforcement seem to create the greatest willingness on the part of villagers to contribute to environmental protection. But not all forms of institutional enforcement are equally available to all forest councils. If the number of households in a village is small and the households are relatively poor, the ability of villagers to contribute toward the payment of a guard's salary is limited. If a village is highly stratified or if there are many disagreements among the villagers, they are also less able to enforce environmental regulations sustainably. Indeed, a plethora of local variations shapes the options available to councils. These variations in village-level processes also influence the extent to which different village communities are able to take advantage of the state's willingness to disperse rule and decentralize control over forests.

Intimate government is partly about the reduction of physical and social distance in government as community becomes the locus and source of new regulatory strategies and partly about the ways villagers try to shape their own conduct in forests, what some scholars have termed "self-government" (Dean 1994, Rimke 2000). Intimate government also works among villagers as they come to recognize social and physical limits on the extent and use of forests and begin to accept and defend restrictions that make practice conform to such limits. Government at a distance works in Kumaon only in con-

junction with intimate government in its multiple forms—through the community, through formally crafted local regulation, and as situated within the subjectivity of villagers. With the redefinition of interests that exposure to scarcity and regulation makes explicit, a calculation of the costs and benefits of illegal harvests from their own forests versus those from state-controlled forests or other communities' forests has now come to pervade the environmental practices of households. Instead of simply harvesting the fodder, firewood, or timber they need from forests near their homes, Kumaon's residents now carefully reckon whether, where, how, how much, and when to harvest what they need. Careful reckoning is individually pursued but socially shaped. Experiences of scarcity, initially prompted by the widespread administrative enforcement undertaken in the early twentieth century, make such reckoning unavoidable. Projected into the future, they demonstrate the need to redefine what is in the interest of village households.

Thus, it is not simply constraint that new forms of community-based government embody.[39] Regulations may necessitate careful estimations of availability and scarcity, but they go together with possibilities for other kinds of corrective action against decision makers. If villagers do not approve of the way in which their forest is being governed, they can attempt to change the regulations adopted by their council members or even change the council membership. Even if regulations do not change regularly and frequently, the vulnerability of the council's decision makers to elections and of their decisions to local challenge makes community-based government of the environment very different from government with the Forest Department fully in charge. Channels allow influence to flow in multiple directions rather than only one way. And the everyday regulation of what happens in forests is influenced far more directly by the forest councils than it ever was by state officials in the Forest and Revenue Departments. Villagers now protect forests and control illegal practices of harvesting and extraction. They use the language of regulation and many of the same idioms of protection that state officials deploy, but they do so in pursuit of goals that they imagine as their own and in which they often construct state officials as inefficient, unsupportive, or corrupt. This imagined autonomy, stemming from precisely the practices of conservation encouraged by state officials, is crucial to the success of decentralized protection.

My focus on variations in monitoring practices and subjectivities moves away from the abstract, static categories of social classification based on caste, gender, or territorial location. The many variations in the nature of regulatory practices within villages and within binary

39. Much of the literature on environmental politics that uses an analytic of domination/power and resistance/marginality provides arguments coded by this structural division between freedom and constraint. See, for example, Brosius (1997) and Fairhead and Leach (2000) and, for a contrastive study, Moore (1998). More general studies of domination/resistance are also subject to the same tendency (Kaplan and Kelly 1994, Lichbach 1998).

categories—men and women, upper and lower castes, rich and poor—render such classifications only partially useful at best. Terms such as "cultural forms" and "symbolic systems," central to Paul Willis's penetrating study of the reproduction of the difference between capitalists and workers, seem similarly distant from the process of subject making. Willis is also concerned with questions of the "construction of subjectivities and the confirmation of identity" (1981: 173), but it is in the examination of the actual practices of schooling among "working-class kids" rather than in its abstract cultural-Marxist theoretical structure that his study produces the most compelling insights.

The responses and practices of Kumaon's residents suggest that social categories such as gender and caste are not very useful for understanding subject formation. Indeed, they serve precisely to obscure the processes through which subjects are made. These categories are useful only as proxies, hinting at a small fraction of the interactions that go into the making of environmental subjects. A shift away from categorical relations toward villagers' involvement in practices of socio-ecological regulation helps to uncover how conceptual units of analysis such as politics, institutions, and subjectivities—clearly different concepts in the abstract—are combined in the lives and experiences of Kumaon's villagers. It is in the investigation of the texture of social practice, simplified analytically by a focus on forms of monitoring and enforcement, that it becomes possible to see how environmental politics is lived by those subject to it.

Cultivating Environmental Subjects

The argument that there is a relationship between government and subject formation, between policy and subjectivity (Foucault 1982:212), has been well rehearsed (Cruikshank 1994, Hannah 2000, Mitchell 2000, Rose 1999, Tully 1988). This relationship can be traced especially well by examining the technologies of power that form subjects and encourage them to define themselves in particular ways and the technologies of the self that individuals apply to themselves to transform their own conditions (Miller 1993:xiii–xiv). These two kinds of technologies are joined in the idea of government based on knowledge and visible in the processes that unfolded in the making of environmental subjects in Kumaon.

This paper has chosen not to engage the friction and heat that discussions about Foucault's ethics often generate. Although it is surely important to examine whether his concept of power and subject lead to an inability to criticize social phenomena, what is more interesting for my purposes is the extent to which some of Foucault's later ideas about government and its relationship to subject formation can be investigated on an evidentiary basis in the context of variations in environmental subjecthood

in Kumaon.[40] Foucault is often taken as producing provocative conceptual innovations that cannot be deployed in relation to evidence generated from a social ground. Similarly, much political-philosophical debate on subject formation proceeds as if subjects emerged and existed independent of a historical, political, and social ground. It thus constantly runs the risk of becoming irrelevant to actual processes of subject formation. This paper has undertaken simultaneously to examine Foucault's ideas about subject formation against a social and political context and to think about subject formation concretely rather than abstractly. Although it has simplified the conceptual architecture of philosophical discussions about the subject, it has done so with a view to focusing carefully on a dilemma that confronts much social-theoretical discussion about the making of subjects. More concretely, it has tried to show what differentiates various kinds of subjects by viewing practice as the crucial link between power and imagination, between structure and subjectivity. It is close attention to practice that permits the joint examination of seemingly different abstract constructs such as politics, institutions, and subjectivities.

In this context, Butler's (1997:10) caution against using "subject" interchangeably with "person" or "individual" needs to be taken seriously. Her caution is most useful for its recognition that the relations of power within which subjects are formed are not necessarily the ones they enact after being formed. The temporal sequence she introduces in the relationship between subject formation and power helps underline the fact that the conditions of origins of a subject need have no more than a tenuous impact upon the continuing existence of and actions by that subject.[41] In Kumaon, the production of environmental subjects in the early twentieth century within the Forest Department, one might note, led to a cascade of changes in institutional, political, and social domains connected to the idea of community. It is in this realm of community that new environmental subjects such as Hukam Singh have emerged.

The process of subject formation, implicit in most studies of environmental government, is crucially connected to participation and practice. The practices of enforcement and regulation in which villagers have come

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40. Rorty (1984) complains that Foucault is a cynical observer of the current social order. Dews (1984), calling Foucault a Nietzschean naturalist, asserts that his insights cannot be a substitute for the normative foundations of political critique. According to Fraser (1989:33), Foucault adopts a concept of power that "permits him no condemnation of any objectionable feature of modern societies . . . [but] his rhetoric betrays the conviction that modern societies are utterly without redeeming features." Taylor (1984) advances perhaps the strongest argument in this vein, arguing that Foucault's account of the modern world as a series of hermetically sealed monolithic truth regimes is as far from reality as the blandest Whig perspective of progress (see also Philp 1983). For close and persuasive arguments that engage these critiques of Foucault's ethics and go a long way toward showing their logical and interpretive gaps, see Dreyfus and Rabinow (1983), Miller (1993), and especially Patton (1989), who shows how Foucault's critics misunderstand his use of ideas about power.

41. Butler also emphasizes the linguistic and psychic aspects of the constitution of the subject, not the direct concerns of this paper.

to participate have to do with more careful government of environment and of their own actions and selves. The state's efforts to govern at a distance ultimately made forest councils available to villagers as a new form of government. The recognition of a mutual interest in forests, brought into existence by concessions from the state and experiences of scarcity, led some village communities to constitute themselves formally as forest councils. Simultaneously, the willingness of forest councils to initiate processes of intimate government in their own communities affected the way villagers participate in government and the extent to which they are willing to work upon themselves to become environmental subjects.

Comments

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Perceptions of the environment and responses to the opportunities it offers and the constraints it imposes are an extremely important subject in view of the precarious condition of the environment in most regions of the world. Earlier studies have dealt with environmental movements (Guha 2000), perception (Cowie 2002, Sahlins 1995, Guha 1999, Brun and Kalland 1995, Sorokin 1937–41), adaptation (Gadgil and Malhotra 1979, Gupta 1991, Jodha 1998), and institutions and governance (Prakash 1995, Ramakrishnan et al. 2000). Agrawal makes a useful contribution with regard to the relationship between beliefs, perception, and action. Sen (1980) drew attention to the twin challenges that scholars and policy makers face in describing a phenomenon. Recognizing that any description is partial and guided by prior beliefs and assumptions, one can seek to prescribe a course of action or policy or to predict certain consequences. Agrawal attempts to do both.

The literature on innovation and my experience with creativity at the grass roots in the Honey Bee Network have convinced me that individual agents have substantial autonomy in formulating and implementing their strategies for perceiving and responding to the environment. A contingency framework has merit only to the extent that it allows for inertia and helplessness. Any theory which enables actors (not subjects) to take responsibility for their actions must build upon perceptions of the phenomena that are consistent with their philosophy. Agrawal might have explained that his choice of an aspect of reality to describe was guided by beliefs that he has about the scope for action that remains for actors as distinct from third-party scholars.

The protection of the environment in any region cannot take place without the direct participation of the people who live there. It is true that they have protested, but this has been not so much against the protection of the environment as against the attempt to protect it through exclusion, insularity, and sometimes explicit hostility between the state and the local communities (Guha and Gadgil 1996). It would have been useful in the discussion of the setting of fires in the forest to recall a mid-nineteenth-century debate summarized by Cleghorn in 1848 (Barton 2000). After a review of various views on the subject, Cleghorn tended to see fire as a means of clearing the forest floor and preventing the proliferation of a certain beetle that would otherwise have multiplied in the dead trees left lying on the ground and attacked the healthy ones, leading to a decline in the forest cover. Once this debate is brought into focus, the meanings of many statements quoted by Agrawal become contentious and therefore illuminating. The quotations about what farmers perceive themselves as gaining from conservation are very helpful in making the case for their active participation in governance of the forest. It is evident that institutionalization influences people's intentions and the inferences they draw from their actions. Once the forest councils had been created, a platform for negotiating individual interests became available, and individual concerns converged in some cases and diverged in others. The strength of the paper is in its explanation of the way people began to modify their perceptions of and responses to the need for forest protection. I am not convinced that these changes can be explained solely in terms of the availability of the institutional platform and not also in terms of increased dependence on the public forest. From the point of view of transaction costs, spending more time meeting ex-ante transaction costs such as negotiation or finding suppliers would reduce the ex-post transaction costs of enforcement, monitoring, and conflict resolution. Agrawal could have studied the differences in perceptions between the villages in which councils were formed and the others in much more detail. Decentralization of decision making has been known to improve performance and accountability. Whether or not governments can ever be intimate, I believe that governance can be. It is a useful point that the portfolio of opportunities that villagers have in the given socio-ecological context will help us understand the linkage between access, assurance, abilities, and attitudes vis-à-vis ecological resources, institutions, technology, and culture (Gupta 1989, 1995,2001; Gupta and Sinha 2002).

The conclusion that people form their own self-image in response to the opportunities for negotiating collective understanding of their environment makes sense. Whether this conclusion required the academic excursion into rhetoric and verbosity evident in the early part of the paper is a moot point. The discipline of anthropology will benefit tremendously if respondents are given an opportunity to comment on and critique scholars' findings and interpretations. Parsimony will be an inevitable consequence if precision in describing the perceptions of scholars becomes a norm. If this takes place in the description of the respondents as well, so much the better.

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Subject formation and its relation to larger socio-historical forces have been pressing issues in anthropology. Agrawal offers a provocative theoretical treatment of the way in which subjectivities are not only constituted but transformed. Typically, identity categories such as race, caste, class, and gender are said to produce stable and predictable sets of interests. Agrawal suggests that even scholars who describe shifts in subjectivities, such as Benedict Anderson and Michel Foucault, rarely discuss the specific processes by which this might occur. He argues that investigation of these processes is best accomplished through attention to practices.

Although Agrawal's attention to changing subjectivities is timely and important, his analysis may privilege the end result of a process that is highly socially mediated. In his framework, identity categories are relevant in interest formation "only to the extent that they facilitate or compel practice." In an attempt to understand the impact of such practices as attending group meetings and acting as a forest guard, he compares individuals who belong to forest councils with those who do not. Yet his focus on these particular practices does not account for the mediation of this situation at many levels by the social context. Individual options are powerfully inflected by culturally specific expectations and institutions, and these in turn are shaped by and shape identity categories such as gender, race, caste, and class. Identity categories may or may not intersect with particular practices so that, for example, there may be few differences in beliefs between men and women who participate in forest councils. I suggest, however, that we need to account for the "prehistory" of this situation. Identity categories may critically influence the possibility or the appeal of certain practices to particular groups. This point does not by any means discount Agrawal's approach but suggests that we might look at the particular forces that compel or foster practice in the earlier stages of this socially mediated process.

When we look more closely at the community forest councils that Agrawal discusses, we find that their membership is highly skewed toward men (more than 90% male in some cases) and women's input is systematically marginalized (Agarwal 2002:188; Kant, Singh, and Singh 1991). Poverty also appears to play a major role in unequal rates of participation among villagers, the poor, disproportionately female, being underrepresented. This may be partly because they have a difficult time paying membership dues. Beyond this, those who have no land must rely on the community forest for fuel wood and fodder and are therefore compelled to commit illegal acts. As Agrawal (2001) reports, in some areas of India 90% of those caught for illegal firewood collection are women.

There are structural reasons for these gendered differences. Cultural gender asymmetries account for many of them, and council regulations stipulating that each household can only have one member (who is almost invariably male) not only reinforce but amplify them (Agrawal 2002). Women and children are almost exclusively charged with fuel wood collection and other forms of forest-based work. The vast majority of the material practices required by the ethic of "care" fall on women, among them feeding animals with agricultural "waste" instead of fodder from the community forest, not harvesting wood locally (and walking farther to state forests or neighboring villages), and changing cooking habits (Agrawal 2002). These examples are some of the many practices, often gender-stratified, which constitute part of the "prehistory" of individuals' potential for joining forest councils.

Similarly, there is no singular forest, and we can explore how a range of forests are created through linkages between institutions, identity categories, and practices. As Agrawal shows, changing institutional forms open up new possibilities for villagers' practices. These practices are not predetermined by identity categories, and therefore, as he points out, we cannot adopt Shiva's assumption that low-caste women are "defenders of the forest." Instead, his work points to the historical contingencies produced by changing institutional forms. Identity categories may play a larger role than is acknowledged in his example, but he provides a way to understand that subjects' interests are not fixed and are related to these larger conditions. Changes in these conditions, in turn, provide new terrains which foster some practices and constrain others and offer a critical space for the production of new subjectivities.

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Agrawal's central point is that there is a strong relationship between the institutional design of government policies, the ordinary practices of citizens (or subjects), and the production of particular subjectivities. He seeks to show that environmental conservationist policies of the state are better served through the devolution of control over forestry resources to the "communities" inhabiting and potentially benefiting from them. His paper stems from a critique of "the common social-scientific practice of using identity categories . . . to infer people's interests." It raises the crucial question of the relevance of institutional policies in the production of frameworks for thinking about and acting upon one's environment, but on the whole I find it a bit disappointing.

First, his critique of the use of identity categories to infer interests (a critique of class- and gender-based explanations of interest-driven struggles) seems to me extremely simplistic. Since E. P. Thompson's (1996) studies of class formation in England, the production of a collective political agency has not been a matter of "belonging" to a pre-given identity category that defines an

essentialized "interest" and determines individual practice. Agrawal seems to view the identity category ahistorically instead of as a set of complex historical processes that drive people to act, feel, and think about their real-life problems collectively at particular conjunctures, including various forms of alliances and struggles even within the group that eventually coalesces as a homogeneous "class." The debate over the recuperation of Gramsci's concept of "hegemony" is an attempt to address this complexity and also to highlight the processes by which subjects' heterogeneous practices may not lead to collective forms of wielding power (Roseberry 1994, Smith 2004).

Following a perspective inspired by Foucault (1975, 1997, 2004), Agrawal seeks to explain the "making of environmental subjects." He presents the passage from a "technology of domination" to a "technology of the self" in the policing of nature by the state and thus the articulation or continuum between the meaning of "subject" as a function of subordination and its meaning as a function of action. However, the survey's questions are very forthright ones of the type "forests should be protected" or "willingness to reduce family consumption of forest products" that are interpreted as "environmental beliefs." Ethnographic information is scarce beyond the "texture" provided by some quotes from interviews, and it is difficult to get an idea of what people "do" beyond what people "say they do." Therefore the ground for the analysis of "practice" as leading to the transformation of subject positions and, as a result, to "intimate government" is weak.

My last uneasiness has to do with the historical evidence. In the first scene the British colonial state is effecting the appropriation of forests located in the Kumaon area, and we witness the confrontations between villagers and the Forest Department concerning access and use of forest resources. We are told that "Kumaonis ignored the new rules that limited their activities in forests that the state claimed as its own" and often "continued to do what they had done before." What we are not told is what form of organization for access to forest resources the local communities had before the colonial state. What previous practices had formed particular subjectivities that were ready to engage with the colonial state in struggles presumably aimed at upholding what they had historically constructed as their "interest"? The relevance of this historical information has to do with what happens in the 1930s when state officials come to realize that they need the cooperation of villagers for the efficient control of forest resources and create "community-managed forests." The new community-managed environmentality therefore appears detached from any pre-existing form of communal management of the forest.

Finally, the paper should be more precise about the devolution of rights to the community. What capacity, if any, does the state retain in establishing the modes of regulation of forestry resources? Why do some villagers voluntarily refrain from participation in collective regulation and enforcement of forestry resources? How,

then, are differential environmental subjects produced? There seems to be a certain circularity in the argument that increased participation in environmental regulation and enforcement produces environmental subjectivities when we are not enlightened as to what sorts of social relations within the village communities enhance or inhibit participation in forest councils.

Agrawal's objective is extremely relevant from both a scholarly and a policy-oriented perspective regarding the consequences of "village community" involvement in forestry management. In my view, however, the concrete historical processes that produce particular forms of government and subjectivities are represented by insufficient evidence, while the data analysis is often obscured by oversignified concepts.

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This ambitious and absorbing paper takes aim at a central problem in environmental politics: how is it that people come to a sense of commitment to their local "environment"? What is it, in other words, that turns them into conservationists? This is a problem that is often naturalized, so to speak, in the academic and activist conservation literature. It is frequently assumed, for example, that a failure on the part of the rural poor to value local nature is a mark of some kind of false consciousness remediable through (environmental) education. There is often little traction here, as critics of this view largely operate within the same episteme, pointing to structural constraints that undercut and supersede education and motivate people to act in their "immediate" rather than their "real" interests. Agrawal's paper effectively dispenses with this problematic by opening up the theoretical apparatus of structure and agency to the more Foucauldian framework of the subject and power. This introduces a range of possibilities, including the attention to government that occupies the center of the paper. (The other elements of the Foucauldian triad—discipline and sovereignty—are less explicitly explored here, though both are conventional sites of "environmentality" analysis.)

The particular way in which Agrawal deploys the idea of "environmentality" represents a productive departure from previous uses of the term to characterize the relationship between environment and government. Rather than focusing on the discursive production and regulation of the environment through the proliferation of supranational institutions, he closely attends to more intimate practices, examining the recursive relationship between the experience of participation in local institutions, subject formation, and expressed political positions (which he carefully delinks from a "politics of location"). This strategy promises to reinvigorate what is already becoming a rather conventional invocation of governmentality in anthropology and cognate fields.

Though Agrawal might helpfully place more emphasis on tensions between the two, he introduces the valuable distinction between government-at-a-distance and "intimate government," the latter intersecting with recent work in anthropology on the practices of the local state and usefully allowing for sensitivity to contingency, openness, affect, embodiment, etc. Still, the ironies of intimate government are worth dwelling on. As he demonstrates, decentralized, localized forms can even more effectively interpellate—and subject—environmental subjects than the more distantly conceived projects on which political ecologists and others have tended to focus.

Nonetheless, what is particularly helpful in this is the move away from a notion of the "environment" as narrowly disciplinary. The analysis here is effectively multidirectional, and the concept of "interests" at play is extremely plastic. Agrawal is not dispensing with the influential notion of "coercive conservation" introduced by Nancy Peluso some years ago. People in Kumaon are subjected in becoming environmental subjects, but they exercise some form of "agency" in and through their subjectivation. Though I suspect that we still have little satisfying to say about the complex and deeply biographical practices through which environmental subjects "make themselves" and, equally, "are made," Agrawal convincingly shows people in Kumaon struggling to negotiate conflicting senses of what might be their "best" interests (e.g., family, landscape, income), and this too is an important intervention.

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With characteristic boldness and verve, Agrawal attempts in this essay nothing less than a break from the way in which we have conventionally thought of the environment. This break is signaled by his use of the category "environmental subjects." Extending the spirit of his thought-provoking work, I would like to ask whether this reworking of the concept of governmentality could be extended farther still, to the point where the politics of Kumaon allows us to think of ways of transforming the concept itself.

As a point of departure we might consider two themes that, though not explicitly stressed by Foucault, are constitutive of his concept of governmentality—its distinctive totality and its intimacy. Now, "totality" might seem to be an inappropriate term to use in relation to governmentality, given the latter's diffuse nature. Yet, if "population" is central to his argument, this is because it is the totality appropriate to governmental power, supplementing and displacing the older totality of the sovereign prince. With its emergence, government can be conceptualized as concerned with the welfare of the population rather than of the prince. The distinctive intimacy of this totality is brought out in Foucault's stress on immanence rather than transcendence. An immanent relationship (as distinct, for example, from the more classically transcendent relationship of states with population that James Scott [1998] stresses in his *Seeing like a State*) is also, to put it too briefly for now, an intimate relation; hence the simultaneous stress on continuity. This concept of governmentality breaks with liberal autobiographies of power, of which the Weberian account is only an especially classical version. In this latter account, the consolidation of modern power involves a move from intimacy to anonymous trust and from dispersed and fragmentary forms of patrimonial power to the transcendental totality of bureaucratic power. Foucault implicitly questioned these accounts.

Clearly, there are significant resonances between Foucault's arguments and the situation that Agrawal describes. Most evidently, there is a shift from no-saying government to one that focuses much more on tactics—intimate government. Nevertheless, there seems to be one significant difference: the impossibility of a governmentalized totality. The forest councils have been instituted because the state cannot control the forests. These councils are thus not only the lowest level of continuity in government but also an acknowledgment of the impossibility of sustaining a totality—of the existence of a politics beyond governmental power. This impossibility of totality and the consequent politics seem to mark the working of the forest councils, with the result that there seems to be a disjuncture and even agonism between them and other levels of governmental power. The forest councils, in this sense, are not continuous with governmental power even when they achieve results desired by the state. This impossibility of totality has far-reaching reverberations. To name just one, if the forest councils are not entirely continuous with government, then their intimacy is not a governmental intimacy; it is, rather, an intimacy which, remaining outside government, achieves some of the state's goals.

My point is simple. It is clear from Agrawal's paper that regulatory strategies associated with and resulting from community decision making transform those who participate in such decision making. Nevertheless, governmentality as a concept may not be adequate for an understanding of these transformations or the operation of power in Kumaon. But I do not for a moment wish to suggest that power in Kumaon is in some way pre-governmental, and even less do I wish to fall back on the historicist waiting-room theories of history involved in Weberian accounts. Rather, it seems to me that Agrawal's argument about governmentality and environmental subjects could be extended further. A presumption that he makes is that the environment that is the object of the state's actions is the same as the "environment" that so many Kumaonis operate with. But is the category "environment" transparent and perfectly translatable in this manner? What techniques of the self, what histories, what displacements are congealed in Kumaoni contestations around the "environment"?

I do not say this from an anthropological perspective.

My argument is not that there are multiple environments and multiple governmentalities—treating power as it does, governmentality is heterogeneous to disciplinary anthropology. My suggestion is rather that because the governmental totality is ruptured (and not only in Kumaon, but always already: this is the sense in which the idea of colonial governmentality is suggestive but too modest about its own potential), the object of government, here the environment, is displaced by other techniques of the self, other histories. In thinking this displacement, perhaps we can rework the concept of governmentality itself.

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Agrawal's paper performs a valuable service by bringing the literature on governmentality and subject formation to bear on the arena of environmentalism. While the idea that environmental subjectivities are transformed in response to changes in policy and practice is not novel even within the Indian context (Mosse 1995; Sundar 2000b, 2001), it has not been the focus of previous research in this area. Agrawal's paper is also useful in that it challenges, though without explicitly naming, both the ecofeminist (Shiva 1989) and the economistic (Agrawal 1998) writing that has been influential in certain strands of thinking on environmentalism in India. While the ecofeminists assume that women are innate environmentalists, the economistic literature reads environmental interests from material interests, class/caste location, etc. Pointing to the reductionism of both models, Agrawal highlights the critical role of institutions and environmental practices in creating new forms of identity and a concern for the environment.

However, he fails to do his project full justice. Indeed, his conclusions appear almost tautological: the more people participate in environmental regulation, the more they realize the need for it. While I appreciate his desire to frame the issues in terms other than the usual ones of common property management and collective action, he might at least have acknowledged the problem that these terms pose. We are told in passing that some villages constituted themselves into forest councils in response to "concessions from the state and experiences of scarcity." Yet surely one would want to know whether existing environmental concerns have anything to do with why scarcity and state concessions translate into action in some villages and not others. For Agrawal, by and large, local environmentalism is an offshoot of the councils rather than a cause. The policy implications are that the more forest councils the government promotes, the more people will be "motivated" to protect the forests. Yet the actual experience of forest policies and practices in Kumaon (and elsewhere in India) seems to have been rather different, with target-driven councils sometimes displacing local initiative.

In Agrawal's reading of the archives, acts of environmental vandalism directed against the forest and the Forest Department such as arson, unrestrained felling, or lopping have gradually ceded—following the 1931 Forest Council Rules — to concern for forest protection and a greater willingness to work with the department. Governance at a distance has worked successfully here to involve people in managing their own resources. An alternative reading of this historical trajectory begins at least a stage earlier and ends a stage later. Precolonial systems of land and forest management were subject to colonial appropriation and reservation of forests. Arson and felling, read here as protest (see also Guha 1989), won villagers a minor victory in the form of the 1931 rules. The government gradually reappropriated powers through changes to the Forest Council Rules in 1976, a bank-funded, target-driven joint forest management program in the 1990s, and a Supreme Court ban on felling (Sarin 2003). In short, while state practices have transformed environmental concerns, this process has been far less linear than Agrawal allows.

Indeed, the history of forest management and the environmental subjectivities it represents—both those of foresters and those of villagers—is extremely complex. In several places, foresters recognized local rights and debated the wisdom of various local environmental practices. Villages with well-worked-out systems of forest protection sometimes gave these up as their forests were taken from them; in others they continued in attenuated form, and in yet others villagers adopted colonial regulations as their own indigenous "customs" (Sundar 2000a). If the subjectivity of villagers changed in response to changing forms of governmentality, so perhaps did that of the Forest Department, despite its being armed with the ideology of "scientific" forestry. One wishes that Agrawal had also studied the transformations in bureaucratic consciousness.

While persuading us that practice is the transformative middle ground for subject formation between domination and autonomous resistance, Agrawal neglects to flesh out the contours of this practice. When he tells us, for instance, that "intimate government involves the creation and deployment of links of political influence between a group of decision makers within the village and the ordinary villagers whose practices it seeks to shape," one expects greater narrative elaboration and critical analysis of these links. Is voicing concern about the forests and contributing monetarily to its protection all it takes to be an "environmental subject"? Or might Sukhi Devi of Nanauli have a different understanding of the forest itself, which privileges short trees and mixed stands as against tall timber species, and a sense of the way in which the social and ecological environments relate to each other that is at variance with that of the decision makers in her village? While Agrawal is right to distance interests from identity, closer attention to practice might have shown how the processes of subject formation depend on location. The kind of environmental subjectivity being framed through participation in these councils appears to be largely an elitist one, which,

as other research has shown, often works at the expense of poor women (Sarin et al. 1998, Sundar 2001).

Reply

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In his story "Funes, the Memorious," Jorge Luis Borges describes for us a perfect memory. Before being thrown by a horse at the age of 19, Ireneo Funes lived like all humans, "looked without seeing, heard without hearing, forgot everything—almost everything." When he recovered consciousness after his fall, he had more memories in himself alone "than all men have had since the world was a world." His world was "almost intolerable it was so rich and bright. . . . [He] could reconstruct all his dreams, all his fancies. . . . Funes not only remembered every leaf on every tree of every wood, but even every one of the times he had perceived or imagined it. . . . Without effort he had learned English, French, Portuguese, Latin. . . . [Nevertheless] in the overly replete world of Funes, there were nothing but details, almost contiguous details."

Raffles gently observes that environmental subjects make themselves and are made through "complex and deeply biographical practices" about which much satisfying work remains to be done. Indeed! To the extent that the other respondents engage the central issue raised in my paper—the relationships between institutions and subjectivities as mediated on the ground of practice—this observation captures much of what they say. I concur with Raffles that my paper suffers from a certain form of descriptive poverty. His own writings in this regard are, in contrast, especially rich, and such richness is surely part of what is necessary to gain a better sense of what it means to become anew.

Having accepted this, I confess that I detect a certain common ground in the responses to my paper. On the surface, they appear diverse in style, in tone, in their specific demands, and in the implicit appeals to the literatures they consider. But consider the main thrust of the different criticisms: Narotzky desires more evidence on concrete historical processes to which I allude and less reliance on the oversignified concepts that I use to analyze my data. Sundar feels that I should have begun my history of the management of Kumaon's environment earlier (and ended it later) than I do, although she does not consider whether such a broadening of historical view would change my analysis or conclusions materially. Hathaway suggests that I could have thought more carefully about how social context mediates the prehistory of participation in the forest councils—a wish that has an echo in Sundar's and Narotzky's pieces. Gupta wants more information about the differences in perceptions between villages where councils were formed and others. These are demands for more evidence,

different kinds of evidence, and more reflection about how concepts such as gender, participation, and class connect to the making of subjects. Most of these criticisms are well justified by the gaps in my paper, and addressing them is likely an important part of what needs to happen to extend and deepen the analysis of changing and reconfigured identities. Instead of responding directly to the imperatives they pose, however, it may be instructive to reflect for a moment on the nature of these criticisms. Ultimately, they all are about the two faces of science—evidence and concepts—that are the staple of most criticisms. Taking the central task of my paper as reasonable and appropriate, even desirable, they indicate other ways in which I should have proceeded, other concepts I could have used to present my argument more convincingly, other evidence I could have deployed. I am heartened by these demands.

The central issue provoking my paper is the belief that establishing connections between institutions and identities, practices and preferences, sociality and subjectivities—a project that was central to the late-nineteenth- and early-twentieth-century social-scientific writings of Marx and Weber and Durkheim—has received much less attention in the past few decades than is its due. In our discipline-bound social-scientific enterprise, economists and many political scientists have placed their faith in a dehistoricized model of rational man that is insensitive to contextual differences. The writings of historians and anthropologists profit by comparison, but it can be said that much of the work on subjectivity in these latter disciplines is insufficiently sensitive to variations in self-formation as such variations are shaped by power. And perhaps it is not out of place to note that theories of agency and the relationship between agency and structure are generally inadequate as lenses through which to understand the making of subjects, tied as they are to an ontological view of power as constraint.

In this context of relatively limited and often ahistorical attention to the deeply biographical processes through which particular kinds of subjects come into being (or do not), the direction and force of the critiques implicit in Narotzky's, Sundar's, Gupta's, Hathaway's, and Raffles's demands convince me that many other analysts would welcome greater and more diverse ways of understanding how new kinds of subjects are made and unmade, when existing identities transmute into new ones and when they do not, and to what extent one can speak of endogenous preferences when thinking about institutional analysis and choice. Therefore, I am pleased, a bit, by the fact that Narotzky is "a bit disappointed." Her concerns and those voiced by the others may stem from grounds that I have chosen to call common, but they are also positive and productive—an implicit argument that far more social-scientific work needs to be done where identities and institutions are concerned, and not only more work but also work across disciplinary divisions that separate scholars of identity, subjectivity, and preferences as surely as if they were imprisoned in different cells of a panopticon. In view of the amount that remains to be done, some of the points

raised in this exchange—regarding whether my analysis is grounded in Foucault or rational choice, whether I use too many words or too few, and whether my respondents and I have represented each other's arguments too simplistically—appear almost irrelevant.

Without undermining the importance of the various points of critique advanced by my respondents, however, let me also note that to engage them in their specificity would also be to lose an opportunity to move the discussion about the relationship between government and subject formation in a somewhat different direction. This direction is prefigured in Skaria's response. His focus on a governmentalized totality engages an aspect of my paper that is relatively marginal to the social-scientific thrust of the argument but central to the philosophical foundations of the relationship between the state and the social. I interpret him to be asking whether it might be possible for government to be total, although he himself asserts quite definitively the impossibility of a governmentalized totality.

The governmentalization of the social marked by the recourse to community and community institutions in Kumaon is a particular technology of power that the colonial state implemented and the postindependence Indian state continued. Setting aside for the moment normative questions about whether such localization of the exercise of power helps or hinders the projects of freedom and equality—concerns surely germane to social-scientific investigations—Skaria's assertion forces us to try to imagine what total government might look like. Although he may essentially be correct that government even in a Foucauldian sense cannot be total, this conclusion blocks avenues that might interestingly be explored. Along one such avenue one might think about the nature of the relationship between the social and the governmental and, analogously, the community and the state. I imagine this relationship, to use a Foucauldian phrase, as one of permanent provocation—in which processes of governmentalization and resistances to such processes may collectively perhaps be characterized by the metaphor of totality. To this way of thinking, government aims to reduce the possibility of unpredictable outcomes by making those subject to government realize the importance of careful use of environmental resources such as forests and pastures or clean air and water. Containing the random, manifesting the illegible, and systematically identifying the reasons behind the seemingly whimsical and the fanciful become the task of government. Collaboration in this task by multiple selves as they learn and cognize the dangers of the unpredictable is the end of government. To the extent that a greater awareness of the dangers of unpredictability permeates imagining about the future, government tends toward totalization. More crucially, to the extent that the provocative relationship between government and the social occupies the strategic use of power in all its forms, that relationship becomes totalizing even if government cannot be.

Several recent poststructuralism-inspired analyses reimagine categorical distinctions such as those between rhetoric and substance, indigenous and scientific knowledge, written and oral strategies of awareness, and the state and the community as mechanisms for organizing human interactions. Insofar as these analyses undermine familiar distinctions, they prepare the ground for rethinking of the relationship between the governmental and the social by suturing together larger conceptual domains within which distinctions related to those between the formal and the informal, in turn linked to the emergence of modernity, cease to make sense. They simultaneously, perhaps unintentionally, make it easier to imagine a totalizing government.

It is necessary here to reemphasize the importance of what I call intimate government. Skaria remarks upon it, but I believe the idea can be elaborated a little to engage more fully his concerns about the possibility of a govermentalized totality. Intimate government is important because it concerns the interpenetration of the social and the personal through the means of power in its positive guises. My paper discusses two different forms of intimate government: that by which selves are remade and that which operates on the social body of the community. It seems to me now that intimate government works not just in two but in many and heterogeneous ways. The sheer heterogeneity and complexity of the biographical that Raffles mentions in passing presages the diversity of intimate government. Borges's Funes "noted the progress of death, of moisture. He was the solitary and lucid spectator of a multiform world which was instantaneously and almost intolerably exact." To think of intimate government should be to imagine the multiformity of governmentalizing forces.

But there is a uniting force that underpins the multiformity of governmentalization once one displaces the state from its central position in the production of government. Government is the use of power in accordance with knowledge: It is inspired by the recognition of necessity that better knowledge confers; it is signified in the ways in which bodies act in a social space. Thus, the necessity to undertake particular courses of action—because they are in one's interest or because they serve the needs of a population—is the singular and totalizing force connecting the heterogeneity of government. Contra Gupta, intimacy, as it marks the network of environmental practices within communities and imagination within selves, is central to a totalizing environmentality. Contra Sundar, the idea of elitism is insufficient to encompass the kinds of government and subjectivities being produced through participation in decentralized environmental institutions. A totalizing government is imaginable within the infinite and limited domains of power that communities and selves signify.

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